Citizen Participation in Community Surveillance: Mapping the Dynamics of WhatsApp Neighbourhood Crime Prevention Practices

### **Abstract: (if needed)**

Despite their recent emergence, WhatsApp Neighbourhood Crime Prevention (WNCP) groups are an already pervasive phenomenon in the Netherlands. This study draws on interviews and focus groups in order to provide an in-depth multidimensional analysis of the watchfulness and surveillance activities within these groups. The conceptualisation of WNCP through the lens of practice theory shows that the use of ICTs in the form of WhatsApp amplified all three dimensions of neighbourhood watchfulness practices. It examines how friction at the intersections of materialities, competencies and meanings affect neighbourhood dynamics as well as the personal lives and experiences of people (who may be unknowingly) involved. While voluntary citizen participation in crime prevention leads to an increase in social support, feelings of safety, and the active prevention of break-ins, it also defaults to forms of lateral surveillance which transcend digital monitoring practices. Pressing issues related to social media use, participatory policing, surveillance, and the normalisation of distrust and intolerance have an impact beyond its localised Dutch context.

#### Introduction

"When there are cars in the neighbourhood we're not familiar with, or when we are not sure about people we have never seen before, we'll take a picture and send it: Do we know anything about this?"

(Pauline, moderator of a WNCP group in City C)

Pauline is the moderator of a WhatsApp neighbourhood crime prevention (WNCP) group in a city in the Netherlands. This study examines surveillance practices within WNCP groups which have gained popularity in the Netherlands since 2013. Neighbours are connected via a WhatsApp group in order to exchange warnings, concerns, information about incidents, and suspicious situations in their street. As illustrated above, Pauline and her neighbours immediately materialise their suspicions into pictures of unfamiliar vehicles or persons. Her quote provides a preview into how voluntary citizen participation in crime prevention practices has inherently ambivalent consequences. This study explores how ICTs in the form of WhatsApp-equipped smartphones amplify neighbourhood watchfulness practices and how this defaults to precarious forms of surveillance.

WNCP groups have a low participation threshold because citizens can easily join a WhatsApp group (Bervoets, 2014) in order to participate in safeguarding practices. This often creates a positive feeling about being aware of neighbourhood activities, as well as feelings of safety (Lub & De Leeuw, 2017; Others & Author, 2018; Smeets, Schram, Elzinga, & Zoutendijk, 2019). Moreover, the existence of WNCP groups can increase social cohesion in the neighbourhood (Van der Land, van Stokkom, & Boutellier, 2014).

However, WNCP groups can also cause feelings of unsafety and distrust, discriminatory practices, risky vigilant behaviour, and privacy infringement (de Vries, 2016; Lub, 2016; Lub & De Leeuw, 2017, 2019; Mehlbaum & van Steden, 2018; Author & other, 2019; Others & Author 2018). Needless to say, these WNCP practices impact the experiences of neighbours as well as passers-by. For neighbours, participants and non-participants, an active WNCP group can change the neighbourhood dynamic into a watchful, and at times distrustful, atmosphere. And even if there are street signs signalling the existence of a WNCP group, passers-by are often unaware of the fact that they are actively being monitored by citizens. It is important to note that surveillance practices existed in neighbourhoods long before WNCP initiatives emerged. Alert neighbours who keep an eye out on the street and who contact neighbours or police in case of trouble are not a new phenomenon. However, the use of WhatsApp, a cross-platform smartphone-based instant messaging application (Church & de Oliveira, 2013) or a similar messaging app has changed neighbourhood interactions and practices. ICTs are known for creating new forms of interaction (Hampton, 2007) and the emerging use of WhatsApp groups within existing surveillance practices is currently changing neighbourhood dynamics and personal experiences, which makes this a pressing issue.

WNCP practices are a form of informal surveillance, the "casual, but vigilant, observation of activity occurring on the street and active safeguarding of property" (Bellair, 2000, p. 140). Notably, these practices can also be seen as forms of lateral, or interpersonal surveillance (Andrejevic, 2005; Trottier, 2012), whereby people actively monitor their peers, or in this case, their neighbours. The goal of this study is to understand mobile technology-driven informal surveillance activities through the lens of

practice theory. Practice theory aims to explain society, culture, and social life through practices, practices are bundles of activities existing of material elements, competences, and meaning. Practices are not static because they change over time (Reckwitz, 2002; Schatzki, 2002; Shove, Pantzar, & Watson, 2012). This makes practice theory particularly suitable to study societal developments such as the impact of the emergence of WNCP groups.

This study maps the consequences of a citizen initiative aimed at improving safety, and shows that surveillance practices in WNCP groups have emerged in different forms and shapes. By highlighting the diversity in WNCP practices and the fact that this phenomenon is still developing, we found that neighbours are improvising on a daily basis in their self-organised WNCP groups. Interviews and focus groups revealed how friction in the conjunction of dimensions in WhatsApp neighbourhood watchfulness practices affects the personal lives and experiences of people (often unknowingly) involved. This study offers an in-depth account of the socio-material elements assembled together in everyday neighbourhood watchfulness and surveillance practices. Pressing issues related to lateral surveillance, participatory policing, and the normalisation of distrustful and intolerant attitudes are highlighted in the results section of this paper. The use of practice theory shows a co-constructed amplification of watchfulness practices revolving around a technical layer (WhatsApp) that brought qualitative change to existing neighbourhood practices and experiences. Despite a more or less unified articulation of purpose – protecting neighbourhoods – differentiations became visible across enacted neighbourhood watchfulness practices and their commonalities. Rather than avoiding these complexities, these tendencies are explored in clusters of actions and materialities.

This study not only addresses the pressing nature of the issues arising in emergent WNCP activities in a specific local context, it also offers an exploration of lateral surveillance practices which go beyond digital forms of monitoring.

### The Dutch context of neighbourhood surveillance practices

WNCP practices can be seen as a form of (lateral) surveillance taking place in a Dutch context. Before exploring these watchfulness practices in the light of surveillance studies, it is important to grasp how WNCP groups relate to neighbourhood block watch groups and to provide an overview of their personal and communal benefits and drawbacks.

# Neighbourhood watchfulness practices in the Netherlands

In the previous three decades, the Dutch government's approach shifted from active governance to regulations wherein citizens are co-producers of safety (Van der Land et al., 2014). Safety has become a shared responsibility of police and citizens. Similar to neighbourhood watch initiatives in other countries, neighbourhood block watch groups are active in the Netherlands. A recent inventory found 661 block watch groups in the Netherlands (Lub, 2016). Block watch revolves around small groups of participating citizens devoting their time to neighbourhood safety. The employment of WhatsApp for neighbourhood watch purposes radically increased the number of actively monitoring citizens in the Netherlands. There are more than 8000 registered WNCP groups in the Netherlands (see the overviews on https://wapb.nl), this shows that WNCP

groups not only supplement but more often supplant physical neighbourhood watch groups.

The sudden omnipresence of WNCP groups throughout the Netherlands caught the attention of policy makers and researchers who address its benefits and drawbacks in a growing body of 'grey' literature. The popularity of the groups can be explained by the low participation threshold and easy accessibility (Bervoets, Van Ham, & Ferwerda, 2016). According to Akkermans and Vollaard (2015), the introduction of WNCP to neighbourhoods in Tilburg considerably decreased the number of break-ins. Their study measured break-in rates before and after the introduction of WNCP and neighbourhood block watch. While these findings are often repeated by news media, the question rises if WNCP groups actually decrease property crime or if it is displaced to surrounding neighbourhoods? Tilburg's WNCP groups might have instigated a 'water bed effect', i.e. a temporary relocation of criminality or break-ins to other neighbourhoods (Van der Land et al., 2014). While the main purpose of WNCP groups is to prevent break-ins, increased social cohesion is also mentioned as a positive effect (Mehlbaum & Steden, 2018; Van der Land et al., 2014). Moreover, some participants feel good about being aware of activity in their neighbourhood, or feel safer when they know about neighbourhood safeguarding practices (Others & Author, 2018; Smeets et al., 2019).

In contrast, an increased anxiety about safety can also be caused by WNCP group participation (Lub & De Leeuw, 2017) as well as an unwanted feeling of being 'monitored' (Author & other, 2019). Apart from these personal drawbacks, the neighbourhood culture can be effected by stereotyping, racist behaviour, and privacy-infringing practices (de Vries, 2016; Lub & De Leeuw, 2019). Moreover, police are often

not involved in neighbourhood safeguarding and surveillance practices (Mehlbaum & Steden, 2018). Citizens engage in participatory policing practices when they assist law enforcement and engage in monitoring, information sharing, reporting, and preventative practices (Larsson, 2017). This inevitably leads to issues of accountability and responsibility (Author & other, 2019. In order to make sense of the inherently conflicting nature of WNCP practices with their beneficial as well as detrimental consequences for neighbourhood dynamics and personal experiences, this study zooms in on how these practices can be seen as citizen-initiated surveillance activities.

# **Interpersonal surveillance activities**

Ubiquitous and accessible mobile and interconnected technologies and devices increase the potential for pervasive forms of digitally mediated surveillance. In fact, people's day-to-day life can be seen as being under constant surveillance, and according to Lyon "humans are surrounded, immersed, in computing and networked technologies from dawn to dusk in every conceivable location." (Lyon, 2007, p. 1). Surveillance pertains to the collecting and processing of personal data for influencing or managing purposes (Lyon, 2007). It is important to note that the collection and processing of personal data is done by a great variety of actors (governmental, commercial or societal) for an even greater number of reasons. "Surveillance is not directed by one centralised entity, but is polycentric and networked" (Niculescu Dinca, 2016, p. 62). This has to do with the multiplicity of (interconnected) surveilling actors and with the diversity of data collected via different channels.

WNCP practices entail multiple forms of surveillance with each their own privacy-issues. First, the group conversations take place on WhatsApp, a commercial platform owned by Facebook, and whereas conversations might be protected by end-to-end encryption, unencrypted metadata still enables commercial surveillance of locations, connections, patterns, and personal information (Rastogi & Hendler, 2017). Second, the potential involvement of police actors in WNCP groups can lead to surveillance by law enforcement, often without knowledge or consent of participants (Author & other, 2019). Finally, as indicated in the introduction, WNCP practices can be seen as a form of lateral surveillance (Andrejevic, 2002, 2007), also known as co-veillance (Mann, 2016), or interpersonal surveillance (Trottier, 2012). This form of social monitoring is based on citizens using digital services to find information about people in their network.

Existing literature is limited to interactive technologies, such as instant messaging, cell phones, Google, home surveillance products and services (Andrejevic, 2007), and social media (Lee, Ho, & Lwin, 2017; Trottier, 2012). WNCP practices also entail a digital counterpart of lateral surveillance when participants view the information neighbours openly share on WhatsApp (phone number, profile picture, status update), or when they use WhatsApp to check if their neighbours are or have been online, and if they've read their messages. Moreover, moderators also often screen new participants on Facebook to check if they are trustworthy. However, most interestingly, WNCP practices offer a different layer to lateral surveillance practices when neighbours actively watch one-another in person. The combination of digital and physical interpersonal surveillance practices is further explored in the results section.

# Research approach: a practice theory lens

WNCP surveillance activities can be seen as practices; routinised types of behaviour which entail configurations of interconnected dimensions, such as: "forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge." (Reckwitz, 2002, p. 249). Shove, Pantzar and Watson (2012) conceptualise these dimensions as competence, meaning and material. When studying practices, the conjunction of all three interacting dimensions should be taken into account (Shove et al., 2012) and hence, they form the lens through which WNCP group practices are analysed in this study.

The material dimension refers to objects as constitutive components of practices (Reckwitz, 2002). Tools, objects, hardware, infrastructures and bodies are paramount to practices, as most actions cannot take place without objects (Schatzki, 2002). Within neighbourhood watchfulness practices, the material dimension consists of physical streets and houses. Moreover, bodies are also material dimensions, in the form of citizens watching their street and passers-by who become (unknowingly) subject of watchfulness practices. Other material dimensions are the tools used by citizens to enhance their practice (binoculars), to collect proof of suspicious activities (cameras) and to contact police, neighbours or others (phones). To successfully engage in neighbourhood watchfulness practices, specific knowledge is required. Competence refers to "understanding and practical knowledgeability" in the broadest sense, including knowhow, background information, practical skills (Shove et al., 2012, p. 23) as well as rules, principles, and explicit instructions (Schatzki, 2002). The particular knowledge needed

for watchfulness practices includes the capability to assess suspicious persons and activities, the knowledge of what is normal and what is deviant behaviour, and the skills to protect the street. Yet, the material and the competence dimensions would not be put to practice without a particular purpose. This is conceptualised in the meaning dimension which entails "the social and symbolic significance of participation at any moment" (Shove et al., 2012, p. 23). For neighbourhood watchfulness practices, this motivational knowledge is based on the desire for a sense of security and the purpose of safeguarding the neighbourhood. Moreover, it signifies the protection of private space and alertness.

Neighbourhood watchfulness practices are the result of particular configurations of material, competence and meaning dimensions. Neighbours are the practitioners producing, carrying out, and reproducing these activities, whereby their shared practices form collective accomplishments (Barnes, 2001, p. 31). Neighbourhood watchfulness entails a bundle of practices including watching the neighbourhood, informing the police, taking action and interacting with neighbours. These practices are not limited to one location, they can be seen as co-located practice bundles (Shove et al., 2012), which emerged in different neighbourhoods. Dimensions of practice shape each other and change over time. Shove et al.'s approach to practice theory (2012) focuses on the evolving nature of practices as the researchers aim to analyse change in everyday life. In order to provide an in-depth account of watchfulness practices, a qualitative research design is used.

### Methods: a qualitative analysis of WNCP practices

The diversity and the novelty of WNCP groups requires an in-depth qualitative understanding of the range of practices. Therefore, this study follows a constructivist grounded theory approach (Charmaz, 2014). Semi-structured in-depth interviews and focus groups have been conducted, transcribed, coded and analysed. An iterative threestage inductive process (with open, axial and selective coding) forms the basis of the analysis (Corbin & Strauss, 2007; Lincoln & Guba, 1985).

### Data sample

This study is based on 14 interviews with WNCP group moderators. In addition, two focus groups were organised with citizen members in order to complement the moderators' views. Because WNCP groups exist in all types of neighbourhoods, sampling was aimed at maximised diversity on the basis of Statistic Netherlands' degree of urbanisation<sup>1</sup>. The Netherlands is one of the most densely populated countries in Europe and this scale identifies categories ranging from a rural 5 (fewer than 500 addresses/km<sup>2</sup>) to an urbanised category 1 (2,500 or more addresses/km<sup>2</sup>). Table 1 includes a respondent list and indicates the urbanity level of their neighbourhoods. The respondents were recruited in several ways; via snowball sampling, Twitter and LinkedIn private and public messages, and the https://wapb.nl online inventory of WNCP groups.

<sup>&</sup>lt;sup>1</sup> The full CBS Degree of Urbanisation scale, based on the surrounding address density:

<sup>1.</sup> Extremely urbanised: 2,500 or more addresses//km<sup>2</sup>;

<sup>2.</sup> Strongly urbanised: 1,500 to 2,000 addresses/km<sup>2</sup>;

Moderately urbanised: 1,000 to 1,500 addresses/km²;
 Hardly urbanised: 500 to 1,000 addresses/km²;

<sup>5.</sup> Not urbanised: fewer than 500 addresses//km<sup>2</sup>. Source: https://www.cbs.nl/en-gb/ourservices/methods/definitions?tab=d#id=degree-of-urbanisation.

Moreover, the personal network of the researcher was addressed to engage low-profile and less prominent WNCP groups.

Table 1: Respondent list

Respondent	Neighbourhood	Urbanity level 2016
Pauline	City C	1
Bas	City E	1
Dave		
Marion	Suburb M	2
Marc	Suburb D	2
Arnold	Town G	3
Lenny	10 Wil G	
Kai	Town S	3
Saskia		3
Rick (Focus Group)		
Henry (FG)		
Jessica (FG)	Suburb H	
Bram (FG)		
Daniel (FG)		
Emma (FG)		
John	Village Z	4
Sven	Town B	4
Klara	Town L	4
Harold		4
Theo (FG)	Village H	
Chrissy (FG)		
Vera (FG)		
Betty (FG)		
Lucia (FG)		
Bert	Village W	5
Ron	Village N	5
Louise	Village S	5

# **WNCP Interviews and Focus Groups**

The interviews were semi-structured and covered a diverse range of topics including the start and development of the WNCP groups, guidelines, examples of successful events and failures, monitoring practices and administrative efforts. On average, the interviews lasted 75 minutes. Most interviews were one on one, yet, two interviews included two respondents. The focus groups, which took approx. 95 minutes each, focused on personal experiences of WNCP participants. The interviews and focus groups provided in-depth accounts of the daily practices in and around WNCP groups. All conversations were conducted in Dutch (relevant quotes were translated into English for this paper), pseudonyms are used to protect the privacy of respondents. The in-depth interviews and focus groups feed into the analysis of WhatsApp neighbourhood watchfulness practices which is presented in the next section.

# **Results: Neighbours' Experiences of WNCP Practices**

As mentioned earlier, watchfulness practices existed in neighbourhoods long before WNCP initiatives first emerged. However, WNCP groups amplified existing surveillance practices whereby WhatsApp use changed the configuration of the three dimensions (material, competence and meaning). Monitoring practices have occurred before in assemblages of houses, streets, bodies, binoculars, and the physical watching practices of neighbours. When citizens wanted to communicate about activities on the street, they had to establish (one-to-one) phone connections or engage in physical conversations. In WNCP practices, these assemblages are amplified by internet connections, (smartphone) cameras, and WhatsApp groups which enable neighbours to

reach all members of their group instantaneously in order to inform or activate them. The seemingly invisible internet infrastructures manifest itself in connectivity icons and the WhatsApp interface on mobile phones and other devices. With cameras embedded in mobile phones, pictures can immediately be shared with neighbours, police, and others. Thus, the expanded material dimension directly enhances the competence dimension as WNCP participants have gained the facilities to activate and inform neighbours and police more effectively than before the use of WhatsApp. Moreover, the competence dimension also changed because participating in WNCP practices requires skills that were not needed before. Namely, citizens need to know how to use their smartphone, to install WhatsApp, and to communicate with their neighbours. Furthermore, the meaning component now includes connectivity, which is indispensable for the continuous communication with neighbours.

# **Distinctions in Competence and Meaning Dimensions**

When WhatsApp groups were integrated in neighbourhood watchfulness and surveillance practices, a reconfiguration of the three dimensions took place. During the interviews it became clear that, while the material dimension of WNCP practices has similar aspects across groups, WNCP groups were different in their competencies and in the meaning they attributed to their practices. The competence dimension varies across groups because moderators differ in their access to professional knowledge and support. In some of the neighbourhoods, police and municipalities inform and advise the WhatsApp moderators actively (high competencies), whereas such knowledge is absent in other neighbourhoods (low competencies). In the interviews, the meaning or purpose of

the groups was discussed, and it became clear that the meaning that members and moderators attribute to the practices they perform can be understood as ranging from narrow to broad. In neighbourhoods where the WNCP group has a *narrow meaning*, the focus is solely on safety; on preventing break-ins and burglaries. In contrast, other moderators want their groups to serve a *broad purpose* and also allow social support practices (such as watching neighbourhood children and supporting neighbours in need).

Table 2 lists the differences in meaning and competence, and based on these differences, four clusters can be identified with similar levels of competence and range of meaning. The matrix in Figure 1 visualises these clusters and displays tendencies which are used as analytical tools in the analysis. In order to grasp how these WhatsApp groups function and how their different configurations impact parties that are (sometimes unknowingly) involved in surveillance practices, the characteristics and particular issues of each cluster are examined next.

Table 2: Differences in Meaning and Competence levels across groups

WNCP group	Meaning	Competencies
City C	Broad	Low
Town L	Broad	Low
Town S	Broad	Low
Village W	Broad	Low
Village Z	Broad	High
Suburb H	Broad	High
Suburb D	Broad	Medium
Town B	Narrow	Low
Village S	Narrow	Low
Village H	Narrow	Low
Suburb M	Narrow	High
Village N	Narrow	High
City E	Narrow	High
Town G	Narrow	High

# Meaning

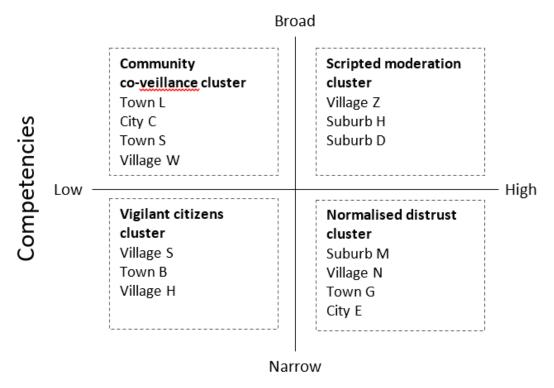


Figure 1. Clusters of WNCP groups with similar competencies and meaning

### 1: Community co-veillance Cluster

The first cluster includes neighbourhoods in both rural village environments and urban contexts and is characterised by broad meaning and low competencies. More specifically, the WNCP groups in this cluster serve a broad purpose with room for social support, and they are initiated and sustained without police or municipal involvement. Group members have knowledge about their community but lack strongly enforced guidelines or access to professional (police) knowledge. As Klara (moderator Town L) notes: "I don't even know who our community police officer is." Consequently, group members use intuition and common-sense beliefs to make decisions about what is to be considered suspicious or deviant behaviour and how to react. There is no formalised

hierarchy present as the low-profile set-up often includes multiple moderators (ranging from two to six moderators) and power structures remain invisible.

The groups in this Community co-veillance cluster are largely self-governing and have a relatively small group size (30-150 members). Their informal nature is emphasised by the broad meaning members attribute to the groups. First and foremost, the WhatsApp groups are targeted towards increasing safety in the neighbourhood. Kai, moderator in Town S, states: "I believe that it also provides sort of a sense of security". While preventing burglaries and break-ins is the primary purpose of the groups, they leave room for social exchanges and social support. For moderator Pauline (City C), their WNCP practices are characterised by communality: "Our sense of community is stronger now." This communality is accompanied by a sense of increased social support, neighbours help each other. Moderators and members shared examples of practical, functional and supportive content; e.g. a keychain found on the sidewalk (Pauline, moderator City C) and two parakeets that broke loose (Bert, moderator Village W). Moderator Kai (Town S) adds: "Last week someone lost his cat, that's fine you know, just post that in the group." More tangible forms of social support can also be activated via WNCP groups, as moderator Klara (Town L) illustrates: "We said that [points out of the window] there, someone had knee surgery, [we said] if your husband is working, you can send a message in the WNCP group, like: Hey, who can help me out?"

However, social support easily turns into social control and WNCP group members experience the watchfulness of others on a daily basis. Lateral surveillance, or co-veillance practices lead neighbours to not only monitor the streets but also their neighbours. These practices are guided by a physical dimension, the act of watching one

another in the street. Neighbours physically keep an eye out on the street while simultaneously monitoring their neighbours digitally, WhatsApp offers digital settings that allow users to check when a contact was last seen online and if they have read their message. In Klara's Town L, neighbours are alert and keep an eye on the neighbourhood children, but this also leads to: "everyone knows at what time everyone goes to work." Notably, not all neighbours feel comfortable with being monitored by their neighbours, Moderator Pauline (City C) illustrates: "It is not always pleasant, because it can really feel as if you are being watched, and to what extent is that good?" Inevitably, Pauline tries to protect her personal space: "Sometimes you will keep a bit of a distance, they are your neighbours, but eh... you do not have to be walking in and out all the time." Similarly, Bert (moderator Village W) describes how he feels ambivalent about social support and social control: "Look, it is good that people care about each other and look out for each other... But, well, it is good that people look around anyway, but I'm like, social control, keep it out of my house, they don't have to know everything about me."

The Community co-veillance cluster shows how multi-dimensional informal surveillance practices impact personal lives and daily experiences of neighbours in their own house in their own neighbourhood. This is experienced as a benefit when neighbours keep an eye out for each other and offer social support, yet some respondents feel watched by their neighbours and prefer less social control. Lateral surveillance is both a curse and a blessing in these small and informal WNCP groups.

### 2: Scripted moderation cluster

As opposed to the Community co-veillance cluster with its informal moderation and small groups, the Scripted moderation cluster is characterised by intense moderation and relatively large group sizes. Founders of these groups appointed co-moderators to share administrative and monitoring responsibilities in order to effectively moderate the large populations (the groups typically include 250-350 members and cover a whole village or suburban area). Similar to the groups in the Community co-veillance cluster, the meaning of the watchfulness practices is not solely limited to burglary or break-ins, moderators also welcome notifications of missing children and other pressing issues. Yet, social support is not provided by these groups, since the scope and size of the groups makes them less personal and more detached from everyday issues.

Guidelines and rules play an important role in these groups. Most groups base their guidelines on the SAAR method, an abbreviation that stands for Signaleer (see), Alarmeer (alert the police), App (inform the neighbours), Reageer (react) ('Huisregels', 2015). The SAAR method, devised in City E and adopted by many WNCP groups, can be seen as 'abstracted knowledge' that circulates between sites of enactment (Shove et al., 2012). In other words, competence transcends localised WNCP practices. Village E moderators translated their knowledge into the abstract SAAR method which was shared online and subsequently decoded and adopted in other neighbourhoods. In the Scripted moderation cluster, the use of the SAAR method and additional rules is informed and complemented by professional knowledge, as these groups are supported by community police officers who provide day-to-day advice. Community police officers streamline the

(lateral) surveillance practices in these neighbourhoods by actively guiding the WNCP moderators and members.

What should be evident in this is that WNCP practices are piecemeal configurations, bringing together different types of (professional) knowledge and networks. Instead of using technologies specifically designed for watchfulness practices (such as the application Nextdoor), moderators and members make do with the resources at hand. This bricolage approach (Ciborra, 1992) includes tinkering with the messaging app itself as improvisation and adjustments occur on the part of both moderators and members. The piecemeal character of WNCP groups often leads to misunderstandings and tensions in the groups – tensions caused by members that share content deemed irrelevant or inappropriate by other members or moderators. John (Village Z) provides examples of irrelevant content shared in his group: "The sidewalk for example. If it's wonky and uneven, that has to do with safety, but you should go to the municipality. Or a damaged street light, you shouldn't post that in the WhatsApp group." Likewise, it is deemed irrelevant when members unnecessarily react to questions or notifications: "Someone asks: 'Does someone know about...?', and then everyone replies with: 'No'. While if they would wait until one person says 'Yes', no-one else needs to respond." (Lars, member Suburb H). Irrelevant content is often caused by people accidently sending messages in the wrong WhatsApp conversation. Member Rick (Suburb H) also made a mistake: "I wanted to WhatsApp my daughter that she had to come down for diner – she was in the attic. So, I type: 'dinner's ready'. But then WhatsApp restarted because of an update, and I thought it was ready to go, so I pressed 'Send'. And I looked... Oops, it's in the WNCP group."

Misunderstanding and tension arise in WNCP groups because certain key scripts are at play in the Scripted moderation cluster. These scripts – particular visions of the world inscribed in an object or artefact implying a specific relationships between the object and surrounding actors (Akrich, 1992) – combine a variety of actors. These range from an internet connection, a smartphone, multiple human users, and text-, photo-, video-, sound-, emoticon-based messages. The inscribed user (Latour, 1992) of WhatsApp is expected to be capable of using a smartphone, installing the application, and connecting with contacts. The high penetration rate of WhatsApp in the Dutch market suggests that many people follow this script successfully. Research shows that WhatsApp is primarily used as a private platform to interact with close ties (Karapanos, Teixeira, & Gouveia, 2016; Waterloo, Baumgartner, Peter, & Valkenburg, 2017). The informal nature of these interactions in combination with the speed and ease of the platform are not compatible with the serious nature of WhatsApp neighbourhood crime prevention. The SAAR method and other WNCP scripts clash with the script of WhatsApp. As the examples above show, this easily leads to friction in the functional environment of the WNCP group.

The effectiveness of WNCP can be thwarted by misguided reactions and mistakes, which lead to frustrations and conflicts among members and moderators. Failed scripts of WhatsApp as well as the tailor-made guidelines hinder everyday experiences in the WNCP groups. Moderators assemble dispersed network of neighbours, mobile phones, WhatsApp software, streets, and houses in order to protect their neighbourhood and private space against actors with bad intentions. In order to make neighbours uniformly participate in neighbourhood surveillance practices, the moderators in the

Scripted moderation cluster wrote (sometimes extensive) manuals. However, in almost all WNCP groups, frustrations and conflicts emerge when members fail to follow these manuals and thus, fail to adhere to the scripted practices.

#### 3: Vigilant citizens cluster

This cluster of small-scale WhatsApp groups (30-70 members) is characterised by vigilant behaviour in order to prevent break-ins. In contrast to the previous two clusters, the groups within the Vigilant citizens cluster attribute a narrow meaning to their practices. The group moderators do not allow practical or social matters to be discussed in the WNCP group. Moderator Louise (Village S) even decided to create an additional group to solve tensions similar to the aforementioned discussions about irrelevant content: "For all the other things that people deem important, we made a social app group." Notably, the existence of a social group is an exception but emphasises the strict and focused character of the WNCP groups in the Vigilant citizens cluster: "The app is purely meant for fire, break-ins and real emergencies" (Louise, moderator Village S). The neighbours within the groups of this cluster display a vigilant mind-set and voluntarily engage in surveillance practices. Notably, they go further than the participants in other WNCP group clusters because they actively started to police their neighbourhood. The specific configuration of dimensions in this cluster can be characterised by narrow meaning and low competence levels because no police actors have been involved in initiating or moderating the groups. The vigilant surveillance practices in this cluster are a precarious form of participatory policing (Larsson, 2017).

Citizen initiated policing activities can affect passers-by who are (often unknowingly) subject of watchfulness practices. When walking through an unfamiliar neighbourhood, there is always the chance of being watched by residents. While spying eyes and suspicious glances might make one feel uncomfortable, WNCP surveillance practices augment this. Suspicions about passers-by are immediately materialised when a WNCP member sends a WhatsApp message to neighbours. This can lead to more neighbours peering through blinds or pulling back the curtains, which will invariably affect the experiences of passers-by. Furthermore, it is not just messaging but also the potential to be photographed. Cameras on smartphones can be used in unnoticeable ways and a picture of an allegedly suspicious person can be snapped in a split second. WNCP members often share images and some go great lengths to collect visual proof. Harold provides an example:

"My wife said: 'what a strange man, he walked by and stopped to look at the houses', so I jumped on my bike to see where he went. (...) And I held my smart phone camera in front of me, and made a picture of him. And these pictures I sent to the police. He didn't notice at all that I was taking a picture of him." (Harold, moderator Village H)

Photographing strangers and sharing pictures with police creates significant privacy concerns. These infringements are even bigger when smartphone pictures and surveillance camera footage are shared within WNCP groups. People who are photographed do not even have to raise suspicion. Not knowing someone can be reason enough to directly materialise even the smallest cause for doubt or distrust, i.e. to make a picture and share it in the WNCP group. However, not all moderators advocate this type

of active behaviour. Some of them only allow pictures of people who are acting obviously suspicious or, as moderator Sven (Town B) explains: "Not until you clearly see that someone walks into gardens, looks into windows and is checking the gates."

Likewise, an often-used rule is one that permits sharing of pictures within but prohibits the distribution of pictures outside of the WNCP group. However, the ease with which visual digital material can be distributed within and beyond WNCP groups presents privacy issues for all actors involved.

Whereas the moderators have communicated guidelines when they started the groups, these rules are often not strongly enforced. Events in Village H show that a low level of competence can cause risky situations. This group stands out because it is the most active group in the sample. During the interview and focus group, it became clear that a relatively large amount of warnings is exchanged in the group. At least once a week one of the neighbours notifies the group about an allegedly suspicious situation, break-in, or another event. Most groups are used far less often. Moreover, moderators and members of Village H frequently take immediate action when they receive a notification.

The abovementioned SAAR method is customarily ignored in highly vigilant neighbourhoods like Village H. Instead of informing the police before taking action, these citizens directly, and often impulsively, react to alerts. Member Vera (Village H) provides an example of a recent event when she distrusted a van that was parked in her street "...So my husband went to the car, and just said: 'Can I help you, is there something wrong with your car?' At that time another person came up, that jumped into the van, and they were gone." Vera reported the suspicious van in the WhatsApp group while her husband confronted the driver, but she did not contact the police until after the

van left. In this and similar situations, the neighbours put themselves at risk. Interactions with suspicious persons might get out of hand or groups of members can get carried away in the heat of the moment. Vigilant actions of neighbours might be aimed at preventing break-ins, some neighbours simultaneously enjoy their participatory policing practices. Members Theo states: "It is just exciting (...) Life is one big risk." This excitement leads to behaviour that can put members and allegedly suspicious persons at risk.

Additionally, participatory policing and surveillance practices are likely to lead to widespread suspicion and ambivalence between neighbours (Reeves, 2012). In Village H, this became evident when moderator Betty saw a person running past her house at the beginning of the evening, a man wearing black clothes and a beanie. Betty did not trust the situation and got into her car: "So I drove around to see where that man went. And later, I posted it on the WNCP group, and then I received a message: 'Yes, that is the husband of one of the women in the WhatsApp group". This example shows that vigilant surveillance practices can default to the lateral surveillance of neighbours not only in the form of monitoring but also by actively following them. Notably, whereas the activity and eagerness to take action are relatively high in Village H, this behaviour, the resulting suspicion, and risks are not limited to this neighbourhood. Multiple moderators shared stories of members that experience messages in the WhatsApp group as a direct call to action. This particularly concerning configuration of practices results in vigilant behaviour which blurs the boundaries between police and citizen responsibilities and puts neighbours and allegedly suspicious persons at risk.

#### 4: Normalised Distrust Cluster

The Normalised distrust cluster includes four large groups with a narrow purpose focused on preventing break-ins, which stand out in their high level of competence visible in a level of professionalisation. In all four groups, community police officers were closely involved in the initiation, promotion, and construction of the groups and thus set the tone for these practices. Police officers assisted in the design of guidelines, and are connected to the moderators in a separate WhatsApp group in order to support them and to use the group's assistance during police actions. Furthermore, the moderators monitor multiple WhatsApp groups that function in compatible manner. Each group covers part of the area and is monitored by a local moderator (on street level) while the interview respondents, who can be seen as supra-moderators, hold an oversight position. Ron describes the design of his groups:

"We have nine WhatsApp groups which are named after their streets, and above these groups is another group and that is the Chief Control group. And in that group are, as I named them, the Ambassadors (...) and they are all part of that Chief Control group, but they are also the moderators of their own WhatsApp group. Let say that, in group [street name] there is a notification. I see that notification and I post it in the Chief Control group. All Ambassadors will see the notification and they take it up and forward it to their own WhatsApp group. This way, we can inform the whole village in three minutes." (Ron, Village N)

These professionalised groups are strictly moderated and comprise formalised practice bundles (Shove et al., 2012). The configuration of these combined efforts is

documented in manuals and whereas they are constructed independently, these practice bundles coincide with municipality and police practices. The self-imposed power that supra-moderators provide themselves with creates a distinct hierarchy in neighbourhood networks. The functioning of multiple WNCP groups in a neighbourhood is determined and steered by one or two individuals who have created this position for themselves. The large-scale nature of these groups (300-3000 members) increases the impact of neighbours' everyday surveillance activities and presents similar issues as in the other clusters but on a larger scale. The rules and conventions of WNCP groups are still in development while they are simultaneously normalised.

When participating in these large-scale WNCP groups, neighbours become acutely aware of particular events which alters their experience of the neighbourhood. Activities in the street that previously would have gone unnoticed, are now materialised into WhatsApp group messages. Neighbours actively monitor their neighbourhood and share suspicions, they also work together in information searching practices (such as looking up a license plate registration online). WNCP participation sensitizes them to suspicious activities. A hitherto underexposed pressing concern of these practices is how determining what is seen as suspicious leads to the normalisation of categorisations and wrongful accusations. When neighbours engage in surveillance practices, they scan the street and assesses the situation at hand. This assessment is based on competence and meaning. The knowledge consulted when making a distinction between suspicious and non-suspicious persons and behaviour is guided by a categorisation of normal and deviant activities. Nevertheless, conventions about what counts as suspicious or deviant

behaviour are ambiguous, there are no clear categories of normal/suspicious/deviant behaviour and persons.

In the interviews it became evident that the categories used by neighbours are often based on stereotypes and prejudice. A worrying number of incidents reported in all four clusters revolved around wrongful accusations based on intolerant categorisations. An example of a situation like this became visible in Suburb H (in the Scripted moderation cluster), where a neighbour consulted the group to voice concerns about a couple of men sitting in a car with a Polish license plate. Henry (member) recalls: "And then immediately someone replied: 'Yes, they belong here, they live here'." Dave (member) explains: "They were only waiting for someone to get in the car." This anecdote and similar cases show that intolerant categorisations are normalised in many WNCP groups. In the large groups in the Normalised distrust cluster, the scale of these discriminatory practices increases, and adequate responses of moderators and involved police seem to remain absent. The fact that these groups widely promote their WNCP templates and methods without addressing these issues, leads to the conclusion that the normalisation of surveillance in WNCP practices includes a concerning normalisation of suspicion, distrust and intolerance towards strangers as well as neighbours (Reeves 2012; Larsson 2017).

#### Conclusion

WhatsApp proved to be a technical layer in the amplification of surveillance practices guided by materialised suspicions. The implementation of WhatsApp to watchfulness practices changed neighbourhood dynamics and personal experiences. The existence of a WNCP group alters how neighbours experience their street because

concerns and possible threats become more immanent. This urges many neighbours to take up their responsibility and contribute to surveillance practices in order to safeguard their neighbourhood. These practices are co-constructed as they are the result of collaborative efforts of neighbours, sometimes in conjunction with police or municipality actors. The immense popularity of this recently emerged phenomenon is of ambivalent nature and has precarious consequences. This study showed that while citizen participation in crime prevention leads to an increase in social support, feelings of safety, and the active prevention of break-ins, it is also accompanied by risky acts of participatory policing and vigilant behaviour. Furthermore, the monitoring of passers-by defaults to lateral surveillance practices, which impact the individual experience of citizens in their own homes and streets. The inscribed user of WhatsApp is often not compatible with the inscribed WNCP member that moderators have in mind. Caveats between scripts and daily practices lead to friction among neighbours.

The focus on WNCP practices enables an examination of lateral surveillance as a combination of digital and physical practices, a valuable contribution to existing literature focusing on digital interpersonal surveillance practices (Andrejevic, 2005, 2007; Lee et al., 2017; Trottier, 2012). Particular "suspicion-driven rituals of lateral surveillance' (Reeves, 2012, p. 238) are initiated by citizens whereby risky behaviour and intolerant attitudes are normalised and integrated in community life. The standardisation of these practices needs to be critically assessed, not only by social scientists but also by institutional actors involved such as municipal policy makers and police officers.

Namely, these vigilant communities in the making raise significant issues for

communities, police and municipalities and the transition of practice bundles across neighbourhoods raises questions about adjustments and standardisation processes.

Whereas this study is limited to an in-depth snap shot of particular Dutch practices with a limited sample, issues were identified that mirror the risky consequences of participatory policing practice in institutionally initiated practices in countries such as the US. The use of a practice theory lens proved to be particularly helpful in distilling the general issues of citizen participation in ICT-supported surveillance practices. The WNCP group clusters identified in this study were crucial in uncovering a variety of pressing issues arising from inherently diverse WNCP practices. This article shows that the emergence of WhatsApp amplified all three dimensions of a variety of neighbourhood watchfulness practices still in the process of stabilisation and normalisation.

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