Grøn Genstart: A quali-quantitative micro-history of a political idea in real-time

Annika SH Isfeldt1, Thyge R Enggaard2, Anders Blok3 and Morten A Pedersen4

Abstract
In this study, we build on a recent social data scientific mapping of Danish environmentalist organizations and activists during the COVID-19 lockdown in order to sketch a distinct genre of digital social research that we dub a quali-quantitative micro-history of ideas in real-time. We define and exemplify this genre by tracing and tracking the single political idea and activist slogan of grøn genstart ('green restart') across Twitter and other public–political domains. Specifically, we achieve our micro-history through an iterative and mutual attuning between computational and netnographic registers and techniques, in ways that contribute to the nascent field of computational anthropology. By documenting the serial ways in and different steps through which our inquiry was continually fed and enhanced by crossing over from (n)ethnographic observation to computational exploration, and vice versa, we offer up our grøn genstart case account as exemplary of wider possibilities in this line of inquiry. In particular, we position the genre of micro-history of ideas in real-time within the increasingly wide and heterogeneous space of digital social research writ large, including its established concerns with ‘big and broad’ social data, the repurposing of computational ‘interface’ techniques for socio-cultural research, as well as diverse aspirations for deploying digital data within novel combinations of qualitative and quantitative methods.

Keywords
Computational ethnography, environmental activism, Twitter, real-time microhistory, political ideas, digital methodology

Introduction: On the trails of grøn genstart
Imagine that the world was suddenly hit by an alarming health pandemic. Imagine that this world was already alarmed by fast-worsening climatic changes. Imagine, then, that a group of concerned green activists came up with a catchy slogan for reminding everybody of this backdrop climatic crisis and extinction risk and the need to address it once the pandemic recedes. Call it grøn genstart, a ‘green restart’. What would be the fate of such a political idea; and what method or methods would we use to find out?

In what follows, we address the latter methodological question in particular, by accounting in some detail for select aspects of a recent digital and quali-quantitative social data scientific mapping of Danish environmentalist organizations and activists during the COVID-19 pandemic. As part of studying digital attention economies and green issue politics within the context of the Danish (and broader Scandinavian) COVID-19 lockdown (in spring of 2020), we were motivated by the opportunity to focus on framing contests between pandemic and climatic...
risk policy advocates as the situation unfolded. Here, *grøn genstart* quickly suggested itself as a poignant political idea and slogan that was gradually picked up by a growing range of actors, organizations and political parties, signalling to varying degrees a commitment to restart the economy post-COVID in a greener, more climate-friendly way. As such, the slogan became a methodologically interesting focal point for inquiry (as per Figure 1), as it directly linked pandemic and green concerns. In equal measure, however, the methodological question of how to perform such a focused investigation, that is, through which types of tracing and tracking via what kinds of digital (or indeed extra-digital) media- and data-sapes, gained credence as challenges warranting in-depth attention in its own right.

Ultimately, the answer we develop in this article, based on our *grøn genstart* case study, amounts to what we argue is or might become a distinct genre of digital social research that we will dub a quali-quantitative micro-history of ideas in real-time. Defining this genre will entail positioning it within the increasingly wide and heterogeneous space of digital social research writ large, including its established concerns with ‘big and broad’ social data (Housley et al., 2014), the repurposing of computational ‘interface’ techniques for socio-cultural research (Marres and Gerlitz, 2016), as well as diverse aspirations for deploying digital data within novel combinations of qualitative and quantitative methods (Madsen and Munk 2019; Munk, 2019). The computationally augmented netnography – or, more precisely, the iterative and mutual attuning between computational and netnographic registers and techniques – whereby we achieved our micro-history of *grøn genstart* thereby also contributes, we believe, to the nascent field of computational anthropology (as per this issue’s introduction).

According to Hsu (2014), the use of computers allows ethnographers ‘to rethink how we sample culture [by] creat[ing] an analytic dialectic between close and distant readings of cultural processes spanning between the micro and the macro’ (emphasis added). As she goes on to explain, this ‘augmented empiricism’ can take ‘two different directions: horizontal and vertical. Horizontal explores general contours of social actions and events. It provides categorical answers and engages with a large number data set typically […]. A vertical […] approach, on the contrary, engages with a single artifact (event, dialog, photo, textile, gesture) that rescales or represents patterns of cultural life across modalities’ (Hsu, 2014).

The present case study may be described as an example of such a vertically directed augmented empiricism by digital-computational means. In what follows we chronicle our computational netnography of *grøn genstart* as it unfolded in real-time, detailing the serial ways in and different steps through which our inquiry was continually fed, re-directed, and enhanced by crossing over from netnographic observation to computational exploration, and vice versa, in a process of mutual attuning. As we shall
see, this attuning went beyond established ideas of ‘mixed methods’ and ‘triangulating data’, as well as beyond a ‘complementary’ view of what digital qual-quantitative analysis is about (Munk, 2019), via a process of mutual interweaving that pushed either approach in unexpected directions (including, as we shall see, beyond the digital strictly speaking). In that sense, our present inquiry and methodological argument picks up from but also pushes beyond earlier quali-quantitative debates to which some of us have contributed (Blok et al., 2018)

Our argument unfolds as follows: we start by relating and positioning our notion of a micro-history of ideas by digital means within the relevant methodological landscape, defining the genre by way of drawing permeable boundaries to better-known forms of digital social research. We then give a relatively detailed account of our own research process, to substantiate the key claim of mutual attuning across computational and netnographic registers. Following this, we present an actual case analysis of *gen start*, commenting along the way on certain methodological choices in terms of how we ‘curate’ the account and what that curation leaves out or unmarked. This leads into a discussion of what, exactly, our approach adds to existing conversations on digitally based quali-quantitative analyses and how that addition is emblematic, in our view, of the account and positioning our notion of a micro-history of ideas by digital means.

Towards a micro-history of ideas by digital means

While we are in no way the first to notice the potential that digitization opens for tracing and tracking singular ideas across space and time (Allen-Robertson and Beer, 2010), it seems to us reasonable to assert that such a project has received only scant attention in the otherwise fast-growing domain of digital social research. Perhaps unsurprisingly, that domain has tended on the contrary to be marked, instead, by certain methodological commitments that gravitate against such a project, including via the extension of research ideals summed up respectively as ‘quantitative’ and ‘qualitative’. In what follows, we attempt to carve out and define the space within which the genre we seek to highlight – that of a quali-quantitative micro-history of ideas in real-time – attains its specificities, by way of positioning it vis-à-vis three established methodological families: computational social science using text as data; netnographic approaches to social media research; and digital methods-based mappings of issue publics, respectively.

Starting in computational social science, the fast-growing availability of digitalized text data and the advent of the so-called ‘text mining’ techniques (such as natural language processing, or NLP) has led to a veritable explosion in the computational study of large text corpora (for an overview, see Hirschberg and Manning, 2015). Sociologists (e.g. Evans and Aceves, 2016), political scientists (e.g. Grimmer and Stewart, 2013) and economists (e.g. Gentzkow et al., 2019) have all picked up these new approaches, and the quantitative study of ‘text as data’ is now mainstream within many social science disciplines. Notably, anthropology remains the exception: here, only tentative attempts have been made towards experimenting with these and other data science tools and methods (Breslin et al., 2020; Ford, 2014; Moats and Seaver, 2019; see also Introduction to this issue).

Indeed, much of the hype surrounding computational social science has revolved around studies of large corpus of unstructured text data mined from social media and other digital platforms (for a particularly ‘big’ corpus, see Michel et al., 2011; see also Bail 2016; Fuhse et al., 2020). A key driver behind the migration of NLP methods into social science is the augmentation, automatization, and amplification of data collection and processing, which have hitherto been carried out manually by (often low-paid and even more often unacknowledged) student helpers and research assistants (Nelson, 2017; Nelson et al., 2018). Here, computational approaches to text as data orient themselves chiefly to the detection or prediction of large-scale symbolic patterns, subsuming particular ideas within broader categories meant to designate thematic or other tendencies (e.g. DiMaggio 2015; Rule et al., 2015).

Still, as should be obvious, there is no inherent reason why NLP and other computational techniques should not be put to use, along with supplementary netnographic ones, in the social-scientific study of comparatively smaller samples of text data from social media and other digital platforms. Nor indeed are there any strong reasons, beyond those of more or less tacit methodological and epistemological conventions, for why such computational techniques of text analysis should be oriented to the study of relatively coarse, homogenous, and large-scale patterns – as opposed to being repurposed for attending more strongly to granularity, heterogeneity, and non-coherent details in digital data-scapes (Ruppert et al., 2013). As we detail later, the genre of a micro-history of ideas calls for just such a repurposing, even as computational techniques are still deployed here to take advantage of the temporal and spatial extensiveness afforded by social media data.

Conversely, the netnographic approach promoted by Kozinets (2019) as a specific version of digital ethnography is certainly oriented to the qualitative details of social media textural meaning and social dynamics and interactions; yet not in a way, we argue, that lends itself easily to the current task of performing a micro-history of ideas. In a rather classical vein, Kozinets (ibid.: 290) defines netnography in no small measure as a hermeneutic project, whose aim is to identity ‘individual pieces of data that capture bigger truths about the larger cultural phenomenon they represent’. 
Here, while explicitly aligning his exploratory approach with simple forms of word counting and mapping also at play in our micro-historical genre (ibid.: 344ff), netnography overall remains oriented to a depth-hermeneutical model of cultural interpretation that is not immediately amenable to our more surface-oriented project of tracing and tracking ideas across granular time and space (Lee and Martin, 2015a). Or rather, as we will show, our deployment of netnography alongside computational techniques entails a need to renegotiate the ‘proper’ level of interpretative depth needed to ‘contextualize’ what remains, in part, a matter of traversing the surfaces of dynamic media- and data-scape.

With a nod to Foucault (2001 [1983]), we think of this largely qualitative but not hermeneutical methodological trajectory of our micro-history of ideas as oriented to archaeology of digital knowledge in a computer-augmented version. Archaeology connotes an interest in describing symbolic traces, or what Foucault called ‘statements’, as they emerge into discourse. But whereas Foucault and his followers (including STS scholars such as Mackenzie, 2017) have mostly sought to uncover the underlying structure (or ‘episteme’) that makes particular discursive articulations possible at a given historical moment, our ambition here is more akin to traditional history of ideas. Namely, in Foucault’s own words (2001: 74), to ‘determine when a specific concept appears, [as] this moment is often identified by the appearance of a new word […] from its birth, through its development, and in the setting of other ideas which constitute its context’ (see also Smith, 2014). With ‘purposeful naiveté’ (Henare et al., 2007), we therefore wish ask (deceptively) simple questions like: What is the origin of the grøn genstart slogan? Who came up with it first? In what context, on what digital platform, did it take off? And why? Computational netnography, as we practice it, is reoriented to these questions.

Informed by media studies and science & technology studies (STS) (Marres, 2017), the digital methods approach has arguably gone furthest in social research to approximate the kind of creative exploration of digital data’s methodological affordances for broad-based and contextually sensitive inquiry that we strive for. Our combination between computational techniques and netnographic observations builds upon and engages with this literature in general and with discussions of quali-quantitative methods in particular (e.g. Blok et al., 2018; Moats and Borra 2018; Munk, 2019). Specifically, our history of the grøn genstart slogan comes close to what Brooker and co-authors dub a ‘semantically driven, temporal analysis’ of social media data (Brooker et al., 2016a: 5; also Brooker et al., 2016b; Ruckenstein, 2019). By reconstructing an unfolding chronological order via a focus on key moments of change, we too seek to make the ‘longitudinal analysis of timeline narratives … an innovative qualitative approach to social media data, which can tap into the depth of meaning that such data may hold for those who produce it’ (Brooker et al., 2016a, 2016b).

Figure 1 in the opening of this article is meant to evoke exactly this kind of event-based timeline, as reconstructed from what became our primary, Twitter-based dataset (a point to which we return in the next section). However, how precisely to arrive at this specific curation of digital trace data, let alone how to move from here in the direction of exploring the graphs’ ‘depth of meaning’, is far from obvious. As Brooker and colleagues themselves point out, ‘this approach […] requires further thought and discussion around the development of scalable computational tools for assisting qualitative researchers in the handling of such large-scale data’ (Brooker et al., 2016a, 2016b). This is where the conversation overlaps, in turn, with discussions on how best to achieve the kind of quali-quantitative integration sought for in many digital methods work, in terms of those practical methodological steps of making disparate data sources ‘complementary’ to each other; assembling them around a purportedly ‘singular’ level of analysis; and manually ‘curating’ them to particular narrative effect (Munk, 2019). Our contribution in this article hinges on a specific methodological response to these questions that we call the mutual attuning of computational and netnographic repertoires within a micro-history of ideas genre. We turn now to unfold this methodology in practice in our case study.

**Tracing the genealogy of grøn genstart: computational netnography in real-time**

As noted in the introduction, the wider project of which our genealogical study of grøn genstart is part combines broad-scale computational analyses across key social media platforms (Twitter, Facebook, Instagram) with in-depth netnographic observations. In this latter register, we ‘scooped’ (Kozinets, 2019) – that is, mapped out, followed, and participated in – the online activities of a handful of climate activist groups and green non-governmental organizations (NGOs) whom we knew to be important in the field. Concretely, this work began in April and lasted until June 2020, and hence lacked behind the ‘entrance into discourse’ of grøn genstart, even as it would cover a substantial stretch of the ideas’ early trajectory (see Figure 1).

Being ‘in-medias-res’, characteristic of the practice of ‘live’ or real-time research that we adopted (Lury, 2012), our netnographic practice hinged from the beginning on our ability to quickly notice recurring patterns that seemed pertinent to our research interests. In this process, as concerns Denmark, we began noticing that the grøn genstart slogan was continuously reappearing across a variety of online as well as offline settings, including Twitter campaigning, mobilization events and public debate. The slogan was seemingly also traveling across organizational domains, not least spanning worlds of activists, politicians...
and the mass media. We gradually refocused our netnographic mapping to follow this ideational trajectory, by narrowing down our focus to scout the work of a handful of actors that frequently used the slogan in their work. Likewise, as a partial breach of standard netnographic practice (Kozinets, 2019), we began attending also offline activist events, reflecting the way the grøn genstart slogan was beginning to flow more or less freely across online and offline settings as lockdown norms were gradually eased.

After our interest in the grøn genstart phenomenon had thus become piqued by netnographic means, we decided to simultaneously and in parallel deploy large-scale digital data to trace the movements, history and effects of this slogan, departing from a set of simple heuristic questions: When, where, how and by whom is it used? In concrete terms, our questions were thus translated into a dual or mixed observation strategy. On the one hand, we started to treat social media and other digital sources as textual archives whose traces would provide relevant clues to our questions. On the other, we continued the qualitative track, adding in a string of targeted (n)ethnographic interviews centred on the grøn genstart slogan and central actors promoting its use. This was facilitated by us participating in events hosted by green NGOs and political parties, sometimes organized explicitly under the umbrella of a ‘green restart’. Clues for whom to interview thereby came from a combination and integration of small-scale (n)ethnographic and large-scale computational data. In the end, we interviewed 16 mostly NGO actors, spanning worlds of activism, journalism, and interest politics, gradually building up our knowledge of the slogan’s history. Finally, we conducted a focus group interview with representatives from NGOs to whom we presented this article in order to discuss and validate our findings.

In quantitative-computational terms, the task of sifting through large amounts of digitally archived text to single out those bits that contain a specific term has nowadays become a relatively doable one; provided that we allow concomitant simplifications, including those imposed by digital platforms. Figure 2 illustrates the outcome of such a basic text mining-like exercise, one that we conducted roughly half-way through our inquiry, namely a quasi-quantitative version of what in standard methodological terms is called ‘establishing the phenomenon’ (Merton, 1987). Sure, the grøn genstart discourse was out there, moving about, as our early netnography had indicated; yet we still needed a better sense of its (digital) context and scale of uptake. We decided for a somewhat extensive digital search in two directions simultaneously, building on and taking advantage of access to digital platforms that we had already negotiated at this stage within the context of our wider research project, with more-or-less ease depending on the platforms.

First, to ensure we had picked the right political idea to focus on, we searched for a range of parallel attempts by activists to combine the climate and the corona agenda in a single slogan, namely grøn genopretning (‘green recovery’), grøn genåbning (‘green reopening’), grøn nystart (‘green new beginning’), grøn og retfærdig genstart (‘green and just restart’) and nej til normal (‘no to normal’).4 Most of these co-existing slogans were discovered via (n)ethnographic fieldwork, although one of them (grøn genopretning) was added in during the subsequent digital search process. Given that all of these search terms are comprised of more than one word, we also searched for contracted versions with spaces removed (e.g. grøn genstart as well as grøngenstart), partly to capture their use as hashtags and to capture both indefinite and definite reflections of adjectives (e.g. both grøn and grønne). Based on our delimitation of relevant platform datasets (as detailed below), it turned out that, across platforms, grøn genstart was by far the most used slogan, with 863 mentions on Twitter during the period in question. This confirmed our initial netnography-based understanding, while also adding a new-found sense of the relevant scale(s) over time (by comparison, for instance, the term ‘corona’ was used 52,508 times on Danish Twitter in March alone).

The datasets underlying Figure 2 were constructed and curated as follows. For Twitter, we used the scraping tool Twint to perform comprehensive searches for tweets containing any of the target terms, in ways that we believe evaded most of the limitations otherwise imposed by the Twitter API (application programming interface).5 In effect, this full-population Danish-language search returned 1,026 tweets in total: 823 for grøn genstart, 72 for grøn genopretning, 66 for grøn nystart, 10 for grøn genåbning, five for grøn og retfærdig genstart and one for nej til normal. For Facebook and Instagram, searches were limited to an inclusive range of Danish NGOs identified as climate-active in the wider research project, as the two platforms do not facilitate broad, word-based querying like Twitter. As such, numbers here are not directly comparable to the Twitter-based results, given that it follows a sampling logic likely to underestimate the full uptake of the slogan on these platforms. For both platforms, posts were scraped by the use of Selenium’s automated browser API. Only the original posts from the NGOs’ pages (Facebook) and profiles (Instagram) were searched, i.e., not potential comments to these posts. This returned 36 Facebook posts in total (30 for grøn genstart, two for grøn genopretning, three for nej til normal, one for grøn og retfærdig genstart and zero for the rest), and 12 Instagram posts in total (10 for grøn genstart, one for grøn genopretning, one for nej til normal and zero for the rest). Finally, going beyond social media, we purchased access to a digital archive of a wide selection of Danish newspapers, and filtered out duplicate news articles, to arrive at the numbers presented in Figure 2 (49 for grøn genstart, 29 for grøn genopretning, zero for grøn nystart, three for grøn genåbning, two for grøn og retfærdig genstart and zero for nej til normal).6
Embedded in this approach, then, is the second direction of digital search, oriented to the question of where, in the sense of via which mediascapes and platforms, grøn genstart seemed to be (primarily) travelling. As noted, any direct comparison of actual numbers across platforms is best avoided, given the divergent data affordances just outlined. Still, it is striking that grøn genopretning is almost only used in news articles, and thus seems to be more of an official media term than the remaining candidates. The numbers are fairly limited, however, with grøn genstart on Twitter carrying more overall activity. This intermittent finding facilitated our decision to focus, from here on, on our Twitter-based grøn genstart dataset as our prime site of analysis, including by visualizing it in the form of time-series (viz. Figure 1).

While these search operations involved a measure of technical skill in handling databases and scrapers, in mathematical terms, our data visualization here relies on the crudest of approaches, that of counting (but see Lee and Martin 2015a on the importance of this more generally). Even so, our approach did involve ‘big data’ or, better put, a large amount of digital traces (if by ‘data’ we mean the turning of such digital traces into material for social research; see Venturini et al., 2018). That is, our corpus involved all the tweets, posts and articles, which did not contain our slogan, but which we nonetheless had to ‘look’ through, in automated fashion, in order to establish that this was the case. It is hard to overestimate, we would venture, the sheer importance of the basic groundwork afforded here by the simple availability and searchability of digital archives, when it comes to the kind of knowledge archaeology at stake. Our minuscule and very specific phenomenon, the slogan, takes shape within and is carved out against a vast digital backcloth. The lesson here, then, is that at times it may take a ‘large’ set of digital traces to establish a ‘small’ result or, better put, a workable dataset for exploring temporal trajectories in sufficient granularity.

Figure 2. Daily use of the six search terms on the four platforms. For Twitter and Infomedia, this includes any tweet or article using one or more of the slogans. For Facebook and Instagram, it only includes usage of the terms in posts by a selected group of NGOs.
The plotting of the ebbs and flows of slogan activity on Twitter (Figure 1) in turn motivated a still more focused, (n)ethnographic questioning: how to make sense of these digital-computational temporal patterns in terms of the activist (and other) practices and motivations involved? Digital archives may have the advantage that they can be exhaustively traversed at limited effort (once access is negotiated). However, to establish a micro-historical data source for our real-time archaeology, a computer-aided search through digital archives is unlikely to strike sociocultural scientists like us as sufficient. Too much ‘context’ is (still) missing of the sort needed to answer not least the question of why, if by this we hang on to the notion that adequate answers must involve some reference to actors’ situated meaning-making (Munk, 2019). Here, while tweets and the Twitter platform constitutes its own conversational context of sorts, it is in no way obvious how to derive more grounded answers from the sole observation that a slogan occurred (digitally).

This is where our use of qualitative data and methods comes in handy, especially since we deploy these not in a serial design after (or indeed before) the digital-computational work, but rather in a parallel process of mutual attuning. Working alongside the digital trace searches, these methods are better poised, initially, to provide practice-near clues as to what specific activists did, in specific settings, with grøn genstart. As noted, initial netnographic observations had initiated our inquiry in the first place, by alerting the netnographer in our team to a widespread use of the slogan across various (extra-) digital settings. Moreover, while digital archives like those mentioned above predominantly capture textual traces, (n)ethnography alerted us to the simultaneous and manifold oral uses of the grøn genstart slogan, online and offline. This was true for political speeches, in the events hosted by climate NGOs, in online activist debates and so on.

Furthermore, while digital archives typically provide some information about who produced the material (say, who wrote a given tweet), much granular information of the sort standardly picked up in (n)ethnographic research is usually missing. In particular, knowing the position from which a user speaks - for instance within an organization – is often important for this kind of inquiry, for which a manual coding and enrichment of the digital archive based on insights gained from observation proves valuable. In our own work, knowledge about such positionalities became readily apparent from participating in activist events, including a sense of who the main protagonists behind the grøn genstart slogan actually were. We then interviewed each of these key actors in turn, bringing along our computationally generated timeline plots (Figures 1 and 2), and using these as (implicit or explicit) props for questioning (Marres, 2017). As a result, our very style of interviewing was temporally and thematically focused by the digital-computational work, just as this allowed for a strong emphasis on specific relations among the involved actors. Later on in the process, we used these qualitatively based insights in going back to the Twitter dataset, reading through the bios (profile descriptions) of each user and categorizing them as either: (a) profiles of climate NGOs or individuals explicitly affiliated with these; (b) political parties, ministries or individuals explicitly affiliated with those (politicians, officials); or (c) other Twitter users neither affiliated with green organizations nor political parties.

The overarching methodological lesson, then, is that arriving at Figure 1 – a result that may on first glance look like any other ‘automated’ digital-quantitative plot of the sort circulating widely in contemporary culture – in fact, involved an extensive, quali-quantitative process of exploration and data curation. In particular, it involved a parallel process of (n)ethnographic exploration, traceable for example in the hand-coded categories of the plot, which could not have been derived simply from scraping the digital data. As such, Figure 1 embodies the kind of mutual attuning between different method registers that our micro-history of ideas portended.

Case study: Mapping the travels of the grøn genstart slogan

In what follows, we recount the methodological-cum-analytical story of our quali-quantitative mapping of grøn genstart’s micro-history. The account is organized around four ‘phases’, which we devised by combining the plots from Figure 1 with our more situated (n)ethnographic knowledge of the slogan’s concrete usage and meaning in different contexts. As such, with a view to the wider methodological aims of this article, we offer up the case account as a concretely curated outcome of and hence an illustration of the kinds of analyses that the genre of a micro-history of ideas by computational (n)ethnographic means may lead to. Overall, we deliberately follow what we consider ‘standard’ chronological narrative conventions in (n)ethnography for most of the account, even as we also point specifically to the methodological intersection with digital data.

As the Danish government instituted its COVID-19 lockdown and other public health measures from 13 March 2020, the green agenda – which had been a prominent issue in both the traditional and social media as well as public debates continuously since the 2019 national election (referred to as ‘klimavalget’ – ‘the climate election’) – all but died out. Among the green actors we spoke to, this was explained as the combined effect of the media’s sudden focus towards COVID-19 and their own moral hesitation to push the agenda. Jesper Gronenberg, who is head of communication at Dansk Energi with stakes in wind energy, put it like this: ‘Climate was top of the pop in the
media leading up to the corona crisis. That came to an abrupt halt. We paused our work both out of political respect for the extraordinary situation and a quiet consideration that it would be a while before there would be room for talking about climate again.

By early April, actors seemingly deemed it more acceptable to pick up the climate mantle again. Indeed, by now, the COVID-19 crisis was perceived as a chance to give momentum to the green agenda. As the managing director of the green interest group Synergi, Katrine Bjerre M. Eriksen explained: ‘Although the situation was alarming and difficult, it also provided us with new possibilities for framing our work, and we decided to work in line with the famous words of Winston Churchill that one should “never waste a good crisis.” Rather than letting COVID-19 overshadow our work, we tried combining the two crises in our work’.

Other NGOs also tried to ‘combine the two crises’. On April 2nd Greenpeace hosted a webinar on digital activism. A poet was invited to help create slogans for the online protests that had temporarily replaced street protests. Participants in the ensuing brainstorm included representatives from several NGOs, a former MP from the left-wing party Enhedslisten, and other activists. The result was a series of new slogans, including ‘If I were a politician, I would solve two crises in one go’ and ‘If we are to fundamentally change our way of viewing the world, we need to accept that normal already was a crisis.”

This was also when grøn genstart entered the picture. As indicated in Figures 1 and 2, from April 1st this slogan played a not insignificant role in the co-ordinated attempt by green activists to communicate to their followers and to the general public the need for ‘talking about climate again’.

Phase 1: March 13th to April 8th: Grøn genstart coined thrice

According to our Twitter data, the very first person to use (and perhaps coin) the concept grøn genstart in a public context was the journalist Karen Lumholt. She runs her own communication bureau, where she conducts independent analyses of political issues. At the beginning of March, Lumholt took a pause from her work and instead began walking around the city, watching, as she explained, what people were doing. She realized that an economic recession was likely to follow from the COVID-19 crisis and pondered if a green recovery might be the answer. This motivated her to tweet the following on March 13th: ‘Is it now we should prepare for a grøn genstart – new, green companies – in 6-8 months? #dkgreen’ (see Figure 3).

Lumholt is not quite sure how she came up with the exact phrase grøn genstart. She wonders whether it came from her reading or a private conversation. ‘I often work intuitively’, Lumholt pondered, ‘in the intersection between facts and a gut feeling – of feeling out where the world is heading’. As we are going to see, this penchant for forecasting the future certainly turned out to hold true for grøn genstart. At this point in time, however, Lumholt’s own tweet did not make it far. ‘It is funny because I am often told that I am a bit too early with my words’, Lumholt only received one like for her tweet, which she explains as being very atypical for her work. ‘Where there used to be resonance, there suddenly was none’, she explained, ‘it was as if no one really wanted to talk about climate change at that time’.

‘It sounded like a hashtag’

‘The COVID-19 is a crisis momentum, a burning platform upon which we can and have to build green’, explained Jarl Krausing, international head of Concito, perhaps the most prominent green think tank in Denmark. Accordingly, in collaboration

Figure 3. Karen Lumholt’s tweet was the first to mention grøn genstart.

Figure 4. Jarl Krausing launched Concito’s usage of the hashtag grøn genstart along with four ideas for a green transition.
with the global research organization, The World Resource Institute, Concito decided to pursue a targeted strategy for how to make the post-COVID societal agenda green. After long deliberations on how best to capture this strategy, they agreed on grøn genstart. ‘It had a ring to it, it sounded like a hashtag’, Krausing explained. On 30 March, he tweeted:

Dear #dkpol @regeringDK You need to act wisely. Read: There is an enormous synergy in a ‘GRØN GENSTART’ of DK’s economy. Move forward with 1. Expanding windmill parks, 2. Renovation of buildings, 3. Expanding the electronic net, 4. Green toll reform @concitoinfo #dkgreen. (see Figure 4)

The next day, Concito launched grøn genstart on their official Twitter profile. Staff members at Concito spread the slogan via their private accounts over the next few days. A number of NGOs, the lobby organization Dansk Industry, and several private green actors also picked up on it. On 9 April, Concito followed suit by launching a rapport entitled ‘En grøn genstart’ (‘A green restart’) (Krausing and Ibsen, 2020), a summary of which was published in the centre-of-left newspaper Politiken a few days later (Hedegaard et al., 2020). Meanwhile, the slogan kept travelling on Twitter and other social media.

On 1st April, an MP (Mai Villadsen from Enhedslisten) picked up the slogan for the first time. The same day, centre-of-left social-liberal party Radikale Venstre contacted Concito to ask if they could use the hashtag. To this, Krausing recalls replying ‘Yes, of course!’ On 2nd April, Radikale launched 13 so-called grøn genstart initiatives (see Figure 5).

Over the following days, the party pushed their newly adopted slogan on print and social media. For example, then leader of Radikale Venstre, Morten Østergaard, hosted an online discussion with Christian Fromberg, a prominent activist in Den Grønne Studenterbevægelse (DGSB), the green student movement, on 3rd April. Here, Østergaard explicitly used grøn genstart to summarize Radikale Venstre’s ambitions. Yet, as we shall see, Fromberg – on his side – also recalls having coined the slogan. ‘Setting the hashtag free’. On their own account, the student activists in DGSB only really began using Twitter in a strategic, coordinated manner following the onset of the COVID-19 lockdown, when they suddenly found themselves being unable to ‘show their numbers in the streets’. It was as part of this new centrality that, on 1st April, Fromberg (as the person in charge of DGSB’s Twitter account) organized a brainstorm with a fellow activist regarding possible hashtags that could be used to kickstart a discussion on green relief packages. First, they tried to coin slogans associated with the season of the year, such as ‘green Easter’ or ‘green spring’, but none of these seemed quite right. Then, a few days after the brainstorm, Fromberg came up with grøn genstart. ‘I don’t really know how I came up with it. It was probably a consequence of having played around with so many words that I suddenly thought of it’, he mused.

DGSB activists posted their first tweets using grøn genstart on 7th April. The same day, they sent e-mails to a large 

Figure 5. Radikale Venstre launched their ideas for a green transition under the heading of grøn genstart.
number of green organizations and movements, politicians and private citizens are known for advocating the green agenda, asking them to participate in a so-called Twitterstorm on the following day (see Figure 6). The aim was ‘to make noise on Twitter’, Fromberg explained and for grøn genstart to become the most trending hashtag on Twitter the following day. ‘Reaching out to people to use grøn genstart in their tweets was a way of setting the hashtag free – everyone could use it in the context they wanted to’, Fromberg said.

The strategy bore fruit. Soon, the hashtag had been shared by 12 NGOs and by several politicians and staff from left-wing or centre parties (Enhedslisten, SF, Radikale Venstre, Alternativet and Frie Grønne), as well as – perhaps most interestingly – the Ministry of Climate, Energy and Food. As Casper Dall, who is head of communication at the ministry, explained, the ministry decided to tap into using grøn genstart because it addressed ‘the need to think as green as possible when restarting the economy’.

Phase 2: April 9th to May 28th: grøn genstart kept afloat

The next phase was characterized by an attempt by Concito, DGSB and other green actors as well as left-wing politicians to retain the traction of grøn genstart on Twitter, in blogs, rapports, debate articles, news coverage, as well as during protests using graphics, banners and posters with this slogan (see Figures 7 and 8). As indicated by the trajectory in Figure 1, they managed, at best, to keep the slogan afloat.

Overall, during this phase, grøn genstart entered the everyday rhythms of NGO attention politics, as the various organizations pushed the slogan for different agenda-setting purposes. Rosanna Børsting Sørensen from Ungeklimarådet (‘The Youth Climate Council’) explained that grøn genstart was meant to reignite dormant discussions on climate: ‘It [the slogan] permitted us to say: “Yes, COVID-19 is a big crisis, but the climate crisis is going to be much worse”’. Hence, the grøn genstart slogan in this phase was increasingly embedded in ‘climate talk’ and NGO agenda-setting work as per (almost) usual – but not without losing some of its initial attraction, and not unconditionally, without symbolic competition and setback.

Several other phrases focusing on green aid packages were coined during the lockdown (as indicated in Figure 2). At times, retfærdig (‘fair’) is inferred in grøn genstart (i.e. ‘grøn og retfærdig’ (‘green and fair restart’)); Klimarådet advocated for a grøn genopretning (‘green recovery’); Extinction Rebellion for a grøn genåbning (‘green reopening’); Dansk Energi for a grøn nystart (‘green new start’); and Greenpeace for a vej til normal (‘no to normal’). Concito’s Krausing feared that these slogans – especially grøn nystart – possibly hurt the green agenda: ‘It developed into a kind of “are-you-a-green-restarter-or-a-green-new-starter.” That was a bit silly. […] In that regard, grøn nystart disturbed that picture somewhat’. Other activists were hesitant in using grøn genstart because they saw its message as unambitious in that it implied a return to a past order – as opposed to a need for radical societal changes. ‘What we would rather have is a reform, but a restart fits with the existing society’, Maja Andersen from ActionAid Denmark said.

According to Fromberg, this was precisely one of the rationales behind the decision of DGSB to begin pushing the grøn genstart slogan: ‘We wanted something, which was not too radical for people to relate to. In hindsight,
there is a weakness in a concept about starting the economy; it holds inbuilt connotations of growth – many interpreted it that way, that it was about green growth – but on the other hand, I suppose it is what makes it possible even for Dan Jørgensen, Minister of Climate, Energy and Food, to use it’. In other words, as grøn genstart became popularized, its meaning also became reinterpreted and renegotiated.

As part of this, on May 11th, 17 environmentalist NGOs published a report entitled ‘Grøn og Retfærdig Genstart’ (‘Green and fair restart’) as part of the umbrella organization 92-Gruppen with 30 proposals for a green financing of the rebuilding of society (Figure 9). Then on May 14th, we see the largest semi-peak during this phase (in Figure 1). Here, the pre-corona citizen proposal for a new climate law was officially passed in parliament. The day saw much traffic on social media praising the activists and politicians who had helped push it through. Radikale Venstre tweeted: ‘Huge respect to you, who fought for the citizen proposal […] Now we need to make the genstart of Denmark grøn […] #dkpol #grøngenstart’. Likewise, Concito director Christian Ibsen tweeted in support of the citizen proposal and using the occasion to remind the politicians about his own grøn genstart agenda: ‘Dear political leaders. Thank you for a strong support of the climate law today. […] A bit of inspiration from @concitoinfo #dkgreen #dkpol #grøngenstart’.

### Phase 3: May 29th to June 5th: DGSB strikes again

This phase comprises two larger spikes on May 29th and June 5th (see Figure 1). On May 29th, DGSB published three suggestions for a grøn genstart and also called for a public protest outside the national parliament as well as cities of Aarhus and Aalborg, on Grundlovsdag (Constitution Day) June 5th. Incidentally, this date also marked the social-democratic government’s birthday, so the protest was explicitly framed as a reminder to the government of its green promises during the previous year’s election campaign (see Figure 10).

DGSB, then, here made a deliberate and ambitious attempt to insert grøn genstart at the heart of Danish civic life and national political identity. A speech by Radikale Venstre’s Morten Østergaard on Constitution Day also picks up the idea, raising the symbolic level of green transition to one of the historic dimensions and democratic master-spirit. Grøn genstart had clearly gained traction in Danish political life at this point.

### Phase 4: June 6th to June 21st: politics quiets down

The final phase was characterized by very little grøn genstart activity. This may be attributed to the mundane fact that the political system was closing down due to the upcoming summer holiday. Still, other reasons may be deduced by taking a closer look at the minor spikes in the relevant section of the plot (Figure 1).

Most notably – and leaving 11th June (online ‘Folkemøde’ or people’s assembly) and 18th June (climate law coming into effect) aside – we see a final, small upsurge in grøn genstart tweets occurring on June 25th. This was the day when a new batch of COVID-19 support packages was agreed upon in parliament, leaving many green actors disappointed by the fact that no green counter-demands for reopening had been imposed on industries with high CO₂ emissions (such as the airline industry). As Michael Minter from Concito tweeted: ‘Bad agreement for the climate. […] What happened to #grønstart and something for something?’. Similarly, as Helene Hagel from Greenpeace put it during interview – unable to hide her disappointment: ‘The political momentum to really get a move

Figure 9. Rapport with 30 proposals for a ‘Green and fair restart’ published by 17 non-governmental organizations (NGOs) from umbrella organization 92-Gruppen.

Figure 10. This event was inspired by COP21 in Paris in 2015 when restrictions against street protests sparked an organization to put shoes out in the streets. The banner reads ‘Kridt skoene, Mette #GrønGenstartNu’ (‘Get ready, Mette #GreenRestartNow’).
on the transition was not used. For a long time, I remained consciously naïve that the momentum was going to be used. […] But in the end, they [politicians] did not do it. […] So, I am disappointed now. And now things have moved on – that was it’.

Or was it? Gron genstart may not have been tweeted much anymore and activist NGOs may have found themselves disappointed that they could not see the message of the slogan in the political priorities. But as a political idea, it may still be too early to rule grøn genstart out. On our part, only an extension of the micro-history just sketched would permit a firmer conclusion. For the time being, we (re-)turn now to discuss the methodological lessons which, we think, can indeed be gleaned from the case study.

Discussion: Micro-historical computational (n)ethnography as quali-quantitative genre?

By way of an extended case account, we hope to have suggested some of the analytical potentials contained, or so we argue, in the micro-history of ideas as a genre of computational (n)ethnography or, more generally, of digitally based quali-quantitative inquiry. Using a manually curated Twitter timeline as our key organizing device, or visual-temporal ‘refrain’ (Halford and Savage, 2017), has allowed us to re-orient netnography to the project of tracing and tracking the social life of an emerging political idea, with social media data-scapes simultaneously repurposed for knowledge archaeology in real-time. Throughout, computational and (n)ethnographic method registers have become mutually attuned in new ways, we suggest, thereby giving flesh to the promises (and likely also pitfalls) of computational anthropology.

Clearly, far from being a done deal, the many methodological and analytical possibilities afforded by combining qualitative-(n)ethnographic and digital-computational tools in these and other ways pose new questions and challenges. Accordingly, what started for us as a ‘purposefully naïve’ question – when, where, how, and by whom is the specific slogan of grøn genstart deployed? – has turned out, unsurprisingly, to contain multiple methodological-cum-analytical nuances and considerations. For instance, in performing the present study, it has become increasingly clear that there are large differences, indeed, between the kind of micro-history of a single idea or phrase that we present here, on the one hand, and various more ‘holistic’ attempts to map broader thematic-discursive patterns and changes of, say, the terms ‘climate’ and ‘COVID-19’. Under the umbrella of ‘issue publics’ and ‘issue mapping’, this latter aim is so far the one most standardly pursued in applications of digital methods (e.g. Marres and Gerlitz 2016; Munk, 2019). Our notion of the micro-history of ideas adds to this, we think, a different and equally interesting project.

Just as issue publics come in many different versions, we follow Allen-Robertson and Beer (2010: 542) to suggest that ‘the mobility of ideas will occur at different paces as they pass through different cultural settings’. In this sense, our grøn genstart case study is just that: a first iteration for thinking through the combinations of (digital) data, methods and theory that will prove most viable for the (quasi-) Foucauldian project of a micro-history of ideas in real-time. On this note, it is worth emphasizing that ours has been very much an abductive process of inquiry (Brooker et al., 2016a), whereby our object of analysis (the slogan) is iteratively co-constructed by the method procedures themselves, broadly construed, but also by selectively mobilized elements of theory. Hence, while we have downplayed these aspects here in the service of our methodological focus, tracing grøn genstart for us has meant also a certain rediscovery (on our part) of Pearcian semiotics as a valuable resource for thinking through the diverse symbolic registers and fine-grained linguistic uses to which political ideas like this is commonly put (e.g. Kurfürst, 2019). Far from the caricature of purportedly ‘data-driven’ inquiries like ours as somehow ‘not requiring theory’, in the end, we thus agree with Halford and Savage’s (2017) suggestion that this kind of digital-abductive inquiry in fact requires more, not less, theoretical work of attuning to emerging data patterns. Follow-up work should seek to demonstrate how this plays out in the micro-history of ideas as a comparative project.

For now, we stick to making a few further methodological observations, to signal how our approach to a quali-quantitative micro-history of ideas by digital means articulates vis-à-vis, and might in future iterations moves closer to or further away from, more established approaches. Hence, in one direction inspired by more computationally inclined traditions, one might seek to capture abstract processes of ‘information diffusion’ on and across digital platforms, and perhaps map these back onto specific actors (Moats and Borra, 2018). From a different and more traditionally ethnographic vantage point, thematically bounded timelines allow for an analysis of ‘everyday’ socio-political discourses on social media by situating it within the wider contexts of specific users’ tweeting practices (Brooker et al., 2016a, 2016b). This is to suggest that, overall, the kind of quasi-quantitative approach that we aspire to remains so far open-ended, with many options for exploring different ‘complementarities’ and styles of ‘curating’ data vis-à-vis each other (Munk, 2019). We ourselves have faced this as ‘choices’ to be confronted: Do we focus on singular actors or average trends across the field; do we hone in on singular events or focus on developments over longer timespans; do we obtain observations from a single platform or do we try to reach across multiple settings – online and offline? While we believe our actual analysis to strike a defensible balance among these polarities, allowing us to benefit from temporal granularity in our data, future work should strive to explore the range of options.

In short, whereas the capacity to ‘zoom’ from individual to aggregate levels of analysis and back has widely (and rightly) been heralded as one of the hallmarks of digital quali-
quantitative methods (Latour et al., 2012), in practice, analysts will invariably make consequential choices along such dimensions, implying also attendant gaps, non-coverage and potential non-coherence (Blok and Pedersen, 2014). What is more, once (n)ethnography is added and introduced to this computer-aided approach, as we have sought to do here, the overall methodological horizon changes in important ways. Hence, for instance, our own practice of a semantically driven, temporal analysis shows the potential for targeting qualitative interviews and observations to an emerging social media-based timeline of collective ebbs and flows, with each method register mutually attuning to the other. For our particular inquiry, as noted, this meant focusing on a specific semantic entity over time and across platforms, with interviews adding depth to our ability to interpret aggregate temporal patterns in view of the specific semantic tactics of particular green organizations. One result of this attempt to combine a social media-based timeline with detailed actor accounts is the new and distinct form of analytical granularity that we call micro-history of ideas in real-time.

These considerations point to potential next steps that mightvaluably extend outwards from our current work. For instance, placing grøn genstart in a broader textual field, such as through an open or closed reading of tweet (and other) text, either manually or through automation (or both), might help draw attention to the wider political project(s) and struggles that it partakes in. Also, as part of an unfolding political debate about COVID-19 responses, a deeper exploration of shifting phases and attendant political decision-making might better elicit relevant dynamics of the terms’ uses. And tracking appearances of the term more exhaustively on other platforms, notably Facebook and Instagram, as well as capturing more meta-data – such as the number of likes or retweets – might help better understand the implications of platform design differences for semantic-political dynamics. These possibilities and their variations are well-known from the literature (e.g. Brooker et al., 2016a). While we thus affirm these as relevant computational-(n)ethnographic extensions, our main point, to reiterate, has been to add the genre of micro-history of ideas in real-time.

Conclusion: Which computational anthropology?

By way of closing, let us reflect briefly on how the method and case study we have here outlined resonates with the wider methodological and epistemological concerns of the present special theme issue on ‘computational anthropology’. As Beaulieu points out, ‘the use of computational tools could provide the basis for a different time cycle in ethnographic work. Whether this will lead to more superficial research, or to more responsive and accountable research … remains to be seen’ (2017: 35–36). While it is best left to the reader to assess whether we have succeeded in producing ‘responsive and accountable’ insights into the ‘rapidly developing phenomenon’ (Beaulieu, 2017: 36) at hand, our motivation has been to instigate a new ‘vector for fieldwork’ (Beaulieu, 2017) to run in parallel with, and mutually attune itself to, computational techniques.

In our case, this kind of analysis has involved a large corpus of (primarily) Twitter data, which has automatically cleaned and manually curated in accordance with our ambition to carry out a computationally augmented micro-history of ideas. Importantly, our specific search across this ‘big’ Twitter dataset did not return very large numbers, and nor did we make use of advanced NLP techniques or other data science-derived modelling techniques. Instead, what we have mostly done is to simply count words (Lee and Martin, 2015a) – but we have done so in real-time, at an extremely granular level, and with a very particular analytical purpose in mind. By deliberately opting for a ‘low-tech formalization for text analysis’ (Breiger et al., 2018), we have sought to home in on and extract those – and only those – specific ‘syntactic mappings that […] preserve semantic meaning’ (Lee and Martin, 2015b). As we hope to have shown, it is precisely this systematic holding back from undue formalization – even when doing so would be computationally straightforward, in turn with existing conventions, and thus seemingly the obvious things to do – that distinguishes our approach from standard quantitative text analysis in computational social science, bringing it closer to the digital methods family.

To return on this note one final time to the figure (Figure 1) with which we began this article: what we have strived to achieve here is to offer a view into and thus uncover the socio-temporal dynamics of ideas at a high level of temporal granularity. In doing so, we have unearthed an interesting family resemblance between the two method registers of digital-computational and (n)ethnographic approaches: both can be re-calibrated and mutually attuned around a project of uncovering such fine-grained patterns – thereby facilitating interpretation and theorizing on new and, yes, better grounds than hitherto. True to the demands on real-time inquiry (Lury, 2012), we have restrained ourselves here from venturing any ‘strong’ explanations for the particular trajectory of the grøn genstart slogan (even as we believe to have provided many essential clues). What we do claim to have achieved, on the other hand, is to have sketched the contours of what could be a more general quali-quantitative method for tracing, describing, accounting for, and – ultimately – explaining the fate of slogans and other (political) ideas as they travel across digital and non-digital spaces and divides. Here, we hope to have inspired other computational anthropologists to join us in the pursuit of such digital archaeologies of ideas via computationally augmented (n)ethnographic experiments in years to come.

Acknowledgements

We thank the three anonymous reviewers as well as the co-editor and guest editor for their comments on this article. The article emerged
from collective work at the Centre for Social Data Science (SODAS), as well as from the DISTRACT seminar series, where many people made valuable suggestions along the way. The work was made possible by an immediate COVID-19 grant from the Velux Foundation, as well as through funding and support from SODAS and the DISTRACT research project (Advanced Grant project 834540 from the European Research Council).

Declaration of conflicting interests
The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the H2020 European Research Council (grant no. 834540) and a Velux Foundation acute corona research grant.

ORCID iDs
Thyge R Enggaard https://orcid.org/0000-0001-7379-5893
Anders Blok https://orcid.org/0000-0002-3403-698X

Notes
1. All of these terms (of ‘online’ or ‘virtual’ ethnography etc.) are widely debated in the literature, with Kozinets adopting a specific (and to some extent contested) stance, primarily in terms of the didactical aspects of netnography. Unfolding these various debates is important but beyond the scope of our present article, oriented as this is to different aims. For a useful overview and methodological intervention close to how we ourselves interrelate netnography and digital methods, see Airoldi, 2021.

2. Anders Kristian Munk (2019) usefully distinguish these moves as pertaining to different styles of quasi-quantitative analysis, with ‘curation’ often the preferred style of digital methods researchers. However, what we call here ‘mutual attuning’ is meant not as an additional independent style, but rather as a set of moves and practices that potentially cuts across all of these styles.

3. In this process, we also noticed how very similar catchphrases of a ‘green recovery’ would emerge in the Anglophone international sphere, including via European Union (EU) policy rhetoric, as well as show up in translated and localized versions in Norway and Sweden. Indeed, secondary sources would later remind us that calls for a ‘green recovery’ were already in international circulation following the global financial crisis of 2008–09 (Shaw and Nerlich, 2016), although it never attained much traction in Danish political discourse. As these brief observations show, plenty of scope exists for extending our Danish focus in subsequent research on the mobility of this particular idea; just as we need to acknowledge that our Danish-language focus expresses its own contingent curation of digital traces that might, for other purposes, equally challenge such a ‘methodological nationalism’.

4. This last slogan was included because it appeared frequently in interviews with activist interlocutors, who ascribed to it similar connotations as grøn genstart.

5. For Twint documentation, see https://github.com/twintproject/twint. Restrictions imposed by the Twitter API is an important topic of on-going digital methods exploration. Rafail, 2018 contains a solid introduction.

6. Specifically, we obtained consent to data use from the following Danish publishers: Berlingske Media, Jyllands-Posten (incl. regional newspapers), Ekstra Bladet, Politiken, Kristelig Dagblad, Borsen, Danmarks Radio (DR), Information, Jysk Fynske Medier, Sjællandske Medier, Nordjyske Medier, Folkebladet, Medicinset Midtjylland AVS, Flenborg Avis AG, Bornholms Folkeblad, Skive Folkeblad, Herning Folkeblad and Kerteminde AVS. We purchased access via a private Danish company (Infomedia). As some articles appeared more than once (e.g. articles by Ritzau), we calculated TF-IDF vectors among articles related to each search term and only kept a single example that had a pairwise cosine similarity between their TF-IDF vectors of more than 0.7.

7. All data access and handling for this project complies with the Danish code of research conduct, including when it comes to GDPR and privacy protection. We have chosen in some cases to show primary Twitter data (tweets) from identifiable individuals without prior consent based on the consideration that these are public figures tweeting in their organizational capacity about contextually non-sensitive issues. In doing so, we acknowledge and support a reflexive research-ethical position whereby such decisions need to be handled cautiously and in fine-grained ways, not simply read off from legal considerations (Williams et al., 2017).

References
Bail CA (2016) Combining natural language processing and network analysis to examine how advocacy organizations stimulate conversation on social media. PNAS 113(42): 11823–11828.