

# ***NEW NORMAL NEIGHBOURHOOD***

SITUATING SPECULATIVE DESIGN

## **Master Thesis Urban Futures**

by Fidel Thomet

17441

## **Supervisors**

Prof. Dr. Frank Heidmann

Dr. Christian Rauch

University of Applied Sciences Potsdam

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# ***Introduction***

On December 31, 2019, the Wuhan Municipal Health Commission published a statement regarding a viral pneumonia outbreak with the recommendation to wear face masks and to avoid non-ventilated and crowded places.<sup>1</sup> By January 23, the city entered lockdown.<sup>2</sup> With COVID-19 spreading and quickly turning into a pandemic, many places implemented similar measures that drastically altered public space and how we move through it. Different local and national policies based on case numbers and risk assessments created multitudes of new urban realities, depending on which spaces shut down and which circumstances allowed people to leave their homes.

In Berlin, after schools, cafés, non-essential shops and cultural institutions first closed down, people sought open spaces. Tempelhofer Feld seemed more crowded than ever. It did not take long to see dance classes — and later illegal raves<sup>3</sup> — move to the outdoors. Simultaneously, several districts started implementing resilient infrastructure such as pop-up cycling lanes to increase distances between cyclists and release pressure on public transport.<sup>4, Fig. 1</sup>

Now, as these pop-up lanes turn into permanent bicycle paths, some might be inclined to perceive crises as great accelerators of urban transformation. Arguably, past crises brought better sanitation, more fire-resistant buildings, and better public transportation to our cities.<sup>5</sup> But by simply adopting the phrasing of crises as

<sup>1</sup> Wuhan Municipal Health Commission, ed. 武汉市卫健委关于当前我市肺炎疫情的情况通报. 2019

<sup>2</sup> William Yang. '直击 <封城> 后的武汉: 人人自危 口罩售罄' (2020)

<sup>3</sup> Manfred Götzke. 'Die Hasenheide in Berlin wird zum Party-Hotspot' (2020)

<sup>4</sup> Deutsches Institut für Urbanistik, ed. *Krisenfestes Radfahren: Die Corona-Pop-Up-Radwege in Berlin*. 2020

<sup>5</sup> Derek Thompson. 'Get Ready for the Great Urban Comeback' (2020)

opportunities, we neglect their devastating effects, that we failed to rectify these inequities before and therefore ultimately caused the disaster, and that typically not much changes for the most marginalised and vulnerable people.



Fig 1 Pop-up cycling lane in Berlin Neukölln

With the emerging climate crises, its subsequent threats on food security and displacement, and other lurking risks such as rising authoritarianism, ageing population, information infrastructure breakdown, or social instabil-

ity, there is some reason to believe that we are about to enter an age of permanent crisis. If we continue only to adopt new policies when the former undoubtedly failed will have cataclysmic consequences. Instead, we need strategies to create momentum for new normals today.

## How can we use the notion of new normals in speculative design to explore responses to potential future crises?

To answer this, I first investigate <new normals> and how they relate to our understanding of resilience. Then, I turn to speculative practice and argue for a situated speculative design that acknowledges the ground from where it starts. Finally, with <New Normal Neighbourhood>, I present a proof of concept for a platform for situated speculative design and actualise and evaluate my findings from the previous chapters.

# ***New Normals***

The September 11 terrorist attacks dramatically changed the lives of New Yorkers well beyond the immediate aftermath of the events. For example, sociologists Abrams et al.<sup>6</sup> observed that increased «patriotism, helping behaviours, and memorial practices» was ultimately incorporated into New Yorks identity and which they came to call a «new normal». Likewise, other disciplines found new normals in the loss of human rights,<sup>7,8</sup> a shift from journalistic objectivity to participatory and embedded forms of reporting,<sup>9</sup> or the long-term effects on the economy.<sup>10</sup>

Given the wide use of the term across research domains, it comes as no surprise that economists picked up the phrase after the 2007/2008 financial crises. Interestingly though, they did so long before any new normal established. To point out that global economies will not revert to their pre-crisis condition,<sup>11,12</sup> to anticipate what this new normal will be exactly,<sup>13,14</sup> and to assure that it «is no less rich in possibilities for those who are prepared».<sup>15</sup>

These descriptive and anticipatory notions of new normals equally exist in the context of natural disasters.<sup>16,17</sup> However, with natural disasters becoming more severe and frequent in the emerging climate crisis, a different notion prevails the academic and journalistic discourse: Disasters are the new normal.

A recent study on extreme events found that global warming of 2°C exposes an eighth of the worldwide population to severe heat waves every year. At 3°C, the number increases to a

6 Courtney B Abrams, Karen Albright and Aaron Panofsky. 'Contesting the New York community: From liminality to the "new normal" in the wake of September 11' (2004), pp. 189–220

7 Davina Bhandar. 'Renormalizing citizenship and life in Fortress North America' (2004), pp. 261–278

8 Abrams, Albright and Panofsky, 'Contesting the New York community: From liminality to the "new normal" in the wake of September 11', op. cit.

9 Dennis D. Cali. 'Journalism After September 11: Unity as Moral Imperative' (2002), pp. 290–303

10 Abrams, Albright and Panofsky, 'Contesting the New York community: From liminality to the "new normal" in the wake of September 11', op. cit.

11 Mohamed A. El-Erian. *Navigating the New Normal in Industrial Countries Per Jacobsson Foundation Lecture*. 2010

12 Ian Davis. 'The new normal' (2009), pp. 26–28

13 Amitai Etzioni. 'The New Normal' (2011), pp. 779–789

14 El-Erian, *Navigating the New Normal in Industrial Countries Per Jacobsson Foundation Lecture*, op. cit.

15 Davis, 'The new normal', op. cit.

16 Merrill L Johnson. 'Geographical Reflections on the "New" New Orleans in the Post-Hurricane Katrina Era' (2006), pp. 139–156

17 Graeme J McColl and Frederick M Burkle. 'The new normal: Twelve months of resiliency and recovery in Christchurch' (2012), pp. 33–43

quarter.<sup>18,19</sup> Is it still appropriate to label these events extreme when they become that common? Lewis et al.<sup>20</sup> found that the record-breaking temperatures of 2015 will be «the new normal by 2040 at the latest» and argue for calling that «the time of emergence of a new normal». While exposure to other extreme events also increases, it does so at a considerably lower level. In the case of tropical cyclones, which likely have much more devastating impacts on land and population, exposure rises from 0.7% under pre-industrial climate to 1.2% and 1.3% at 2°C and 3°C of global warming, respectively.<sup>21,22</sup> That, however, does not mean that the new normal for tropical storms is not emerging anytime soon. When Hurricane Sandy advanced towards United States's East Coast in 2012, Abad-Santos<sup>23</sup> pointed out that «we just can't just throw around «storm of the century»» a phrase that also referred to Hurricane Irene one year prior.

More frequent and severe natural disasters will only form a part of a new normal. For once, they closely link to societal risks such as poverty, displacement, and conflict.<sup>24</sup> However, the new normal of our everyday life will manifest itself in how we, our communities, and our cities respond to such events. For example, when Hurricane Katrina hit New Orleans with devastating consequences in 2005, Johnson cautioned to not strive for going back to the pre-crisis state as it would «set the city up for a repeat disaster».

18 Stefan Lange et al. 'Projecting Exposure to Extreme Climate Impact Events Across Six Event Categories and Three Spatial Scales' (2020), e2020EF001616

19 Jan Volkholz and Fidel Thomet. *Extreme Events*. 2020

20 Sophie C. Lewis, Andrew D. King and Sarah E. Perkins-Kirkpatrick. 'Defining a New Normal for Extremes in a Warming World' (2017), pp. 1139–1151

21 Lange et al., 'Projecting Exposure to Extreme Climate Impact Events Across Six Event Categories and Three Spatial Scales', op. cit.

22 Volkholz and Thomet, *Extreme Events*, op. cit.

23 Alexander Abad-Santos. 'The New Normal of Extreme Weather' (2012)

24 Graham Lawton. 'The new normal' (2019), pp. 34–37



Whether the <new normal> describes a change that has happened, anticipates change that will likely occur, or frames today's extremes as future normality, it always stands in contrast to the former status quo, which has become out of reach.

## COVID-19

In 2020, the <new normal> resurfaced in response to the COVID-19 pandemic and infection control measures. Journalism and academia quickly adopted the term, public health campaigns referred to it,<sup>Fig. 2, Fig. 3</sup> as did popular culture — apparent, for example, in Eike König's adaptation of the New York Times logo.<sup>Fig. 4</sup> At some point, I felt that — even before writing this thesis — every other conversation I had revolved around that term.

Despite its ubiquitous use, there is no shared coherent understanding of what the new normal refers to. Instead, the three notions of the term discussed above in the context of other crises exist simultaneously. Some take it to mean the solitary but shared experience of practising social distancing, lockdown and other regulations aimed at containing the spread of the virus.<sup>25,26</sup> Others anticipate a post-pandemic world without handshakes, in which we continue to wear face masks in public<sup>27</sup> rely on digital learning<sup>28</sup> and might never return to gyms.<sup>29</sup> Still, others argue that pandemic life will become normal as we fail to control either SARS-CoV-2 mutations and variants of concern or future infectious diseases.<sup>30</sup>



Fig 2 New Normal, World Health Organization; Source: <https://www.who.int/indonesia/news/novel-coronavirus/new-infographics/new-normal>



Fig 3 Schritt für Schritt zurück zur neuen Normalität, Dresden-Neustadt, June 2021

But there is also a new understanding of new normals that recognises the pandemic as an opportunity to actively induce lasting change. «Fate will not create the new normal; choices will», argues Berwick<sup>31</sup> in May 2020 and identifies health care terrains for making such choices. They reach from upholding change triggered by the pandemic, such as the growth of virtual care or the capacity to quickly build needed infrastructure, to reducing future risks by preparing for them and actively challenging the inequities revealed by COVID-19. By framing the new normal «not as predictions, but as a series of choices», Berwick assures us that the outcomes of the pandemic are not yet set in stone and that we can actively shape them.

The design of cities plays a significant role in how infectious diseases spread. We could change many things or — if implemented amid the pandemic — decide to keep up to mitigate future pandemics. These strategies go beyond public health and are likely to impact significant parts of everyday life. They include increasing air quality in closed spaces,<sup>32,33</sup> improve public sanitary facilities,<sup>34</sup> improving living conditions by reducing density,<sup>35,36</sup> reducing traffic to avert «Respiratory conditions aggravated by pollution» and «making the urban way of life more healthy and attractive» by offering more room for walking and cycling,<sup>37</sup> using surveillance technologies to track infections,<sup>38</sup> designing spaces that can quickly adapt to different needs,<sup>39</sup> or encouraging economic de-growth.<sup>40</sup>



Fig 4 The Inverted New Normal Times, Eike König, 2020; Source: <https://eikekonig.com>

- 25 Conor Friedersdorf. 'You Will Adjust to the New Normal' (2020)
- 26 Alyson Krueger. 'Virtual Dating Is the New Normal. Will It Work?' (2020)
- 27 S Rab et al. 'Face masks are new normal after COVID-19 pandemic.' (2020), pp. 1617–1619
- 28 Nic Fleming. 'After Covid, will digital learning be the new normal?' (2021)
- 29 Michael Owen. 'How Fitness Will Change Forever' (2020)
- 30 Mattea Bubalo, Laura Foster and Kate Forbes. 'Are pandemics the new normal?' (2021)
- 31 DM Berwick. 'Choices for the "New Normal" .' (2020), pp. 2125–2126
- 32 Adele Peters. 'How we can redesign cities to fight future pandemics' (2020)
- 33 Thompson, 'Get Ready for the Great Urban Comeback', op. cit.
- 34 Peters, 'How we can redesign cities to fight future pandemics', op. cit.
- 35 Jack Shenker. 'Cities after coronavirus: how Covid-19 could radically alter urban life' (2020)
- 36 Thompson, 'Get Ready for the Great Urban Comeback', op. cit.
- 37 *ibid.*
- 38 Shenker, 'Cities after coronavirus: how Covid-19 could radically alter urban life', op. cit.
- 39 Peters, 'How we can redesign cities to fight future pandemics', op. cit.
- 40 Massimo Paolini. *Manifesto for the Reorganisation of the City after COVID-19*. 2020

Some of these strategies do not necessarily yield positive outcomes, Shenker<sup>41</sup> points out. For example, reducing urban density can offset efforts to make cities more environmentally friendly, and health surveillance puts privacy at stake. Therefore, recognising them as choices and considering alternatives — like converting unused office space into apartments<sup>42</sup> or developing privacy-preserving technologies<sup>43</sup> — becomes all the more critical.

### Neither New nor Normal

Some argue that «we're always living in a new normal»,<sup>44</sup> that «there's nothing new about the <new normal>»,<sup>45</sup> and «the <new normal> discourse sanitises the idea that our present is okay because normal is regular».<sup>46</sup>

It is hard to dismiss that our reality — and therefore what we consider normal — is permanently in flux. But cataclysms disrupt reality and make the pre-, mid- and post-crisis normal distinct from each other. Unfortunately, change is not equally distributed and often leaves inequalities and inequities untouched.

Depictions of COVID-19 as the great equaliser typical in the early days of the pandemic and lockdown measures were quickly — and unsurprisingly — dismantled.<sup>47,48</sup> Typically, marginalised groups are the most vulnerable to disasters<sup>49,50</sup> and income disparities increase when those strike.<sup>51,52</sup> Therefore, it becomes almost impossible for these communities to take

<sup>41</sup> Shenker, 'Cities after coronavirus: how Covid-19 could radically alter urban life', op. cit.

<sup>42</sup> Thompson, 'Get Ready for the Great Urban Comeback', op. cit.

<sup>43</sup> Thomas Haas and Fidel Thomet. *Privacy Preserving Proximity Tracing*. 2020

<sup>44</sup> Alexis C. Madrigal. 'Why We're Always Living in "The New Normal"' (2011)

<sup>45</sup> Chime Asonye. *There's nothing new about the 'new normal'. Here's why*. 2020

<sup>46</sup> *ibid.*

<sup>47</sup> Vincenzo Galasso. 'COVID: Not a Great Equalizer' (2020), pp. 376–393

<sup>48</sup> Stephen A Mein. 'COVID-19 and Health Disparities: the Reality of "the Great Equalizer"' (2020), pp. 2439–2440

<sup>49</sup> Elizabeth Marino and Jesse Ribot. 'Special Issue Introduction: Adding insult to injury: Climate change and the inequities of climate intervention' (2012), pp. 323–328

<sup>50</sup> Jacob William Faber. 'Superstorm Sandy and the Demographics of Flood Risk in New York City' (2015), pp. 363–378

<sup>51</sup> Stephane Hallegatte and Julie Rozenberg. 'Climate change through a poverty lens' (2017), pp. 250–256

<sup>52</sup> The Independent Panel for Pandemic Preparedness and Response. *COVID-19: Make it the Last Pandemic*. 2021

action to lead them towards a future with less vulnerability.

O’Keefe et al.<sup>53</sup> argue that disasters are caused not by natural factors but by vulnerability or — in a broader sense — by socioeconomics. Following their reasoning, it becomes apparent that what we have considered normal brought about the cataclysm in the first place. But when we collectively enter a post-crisis normal, we might be inclined to quickly accept the new normal and dismiss systemic issues, that for some, the <new> is alarmingly close to the <old>, and that normal never was good enough.<sup>54,55</sup> Going back to Berwick’s understanding of the new normal as a series of choices, we must understand that it is up to us to ensure that the new normal is more just and inclusive.

## **Bouncing Forward**

Like the inequalities and inequities that make marginalised groups more vulnerable, the strategies to combat infectious diseases and other crises are, for the most part, not new. For example, the Independent Panel for Pandemic Preparedness and Response<sup>56</sup> assessed that «public health officials, infectious disease experts, and previous international commissions and reviews had warned of potential pandemics and urged robust preparations since the first outbreak of SARS». But they also found that «the majority of recommendations were never implemented». However, what was new in 2020 and lacking before was the spotlight on those issues, and the momentum of opportunity

<sup>53</sup> Phil O’ Keefe, Ken Westgate and Ben Wisner. ‘Taking the naturalness out of natural disasters’ (1976), pp. 566–567

<sup>54</sup> Asonye, *There’s nothing new about the ‘new normal’ . Here’s why*, op. cit.

<sup>55</sup> Lesley Head. ‘Transformative change requires resisting a new normal’ (2020), pp. 173–174

<sup>56</sup> The Independent Panel for Pandemic Preparedness and Response, *COVID-19: Make it the Last Pandemic*, op. cit.

and urgency for accelerated change brought about by the global health crisis. Or, as Burkett and Moore<sup>57</sup> put it: «While COVID-19 and the climate crisis appear to signal societal collapse, these are fertile grounds for growth».

The recent push for cycling infrastructure in several major global cities<sup>58,59,60,61</sup> makes this strikingly clear. Despite facing the climate crisis, the transformation of urban transportation often lacks speed. Then, COVID-19 brought urgency and opportunity. There was a need to reduce stress on public transport, while decreased mobility through lockdown measures made it easier to implement pop-up and permanent cycling lanes.

Still, resilience is commonly understood as a system's capacity to return to its pre-disaster state. Or following the literate translation of the Latin word <resilio>, to jump or bounce back. This understanding stands in opposition to the notions of new normals that I have outlined above. A cities population numbers may well bounce back, so does a countries economic output. Perhaps carbon dioxide removal technologies will at some point pave the way to return to pre-industrial temperature levels. But bouncing back ultimately fails to recognise that the underlying social, economic, or climatological system will fundamentally change.<sup>62,63</sup>

By moving away from the strict etymological sense of the word, Manyena<sup>64</sup> offers a more intriguing definition: «<Resilience> can be viewed as the intrinsic capacity of a system, community

57 Maxine Burkett and Naima Moore. 'This Is Just the Beginning: Climate Change, Positive Peace, and the "New Normal" '. Honolulu: University of Hawai'i Press and the Center for Biographical Research, 2020

58 Matthew Taylor and Sandra Laville. 'City leaders aim to shape green recovery from coronavirus crisis' (2020)

59 Matthew Taylor. 'A new normal' : how coronavirus will transform transport in Britain's cities' (2020)

60 Urbanistik, *Krisenfestes Radfahren: Die Corona-Pop-Up-Radwege in Berlin*, op. cit.

61 Claudius Prösser. 'Tempelhof bleibt in der Spur' (2021)

62 Bernard Manyena. 'Disaster resilience in development and humanitarian interventions'. PhD thesis. Northumbria University, 2009

63 Bernard Manyena et al. 'Disaster resilience: a bounce back or bounce forward ability' (2011), pp. 417–424

64 Manyena, 'Disaster resilience in development and humanitarian interventions', op. cit.

or society predisposed to a shock or stress, to <bounce forward> and survive by changing its non-essential elements and rebuild itself». This understanding of resilience acknowledges that cataclysms come with change. Stating the direction also recognises that change can be positive, but it also clarifies that that requires capacity.

When it comes to capacity building, bouncing back emphasises strategies to eliminate uncertainty — including robustness to reduce damage and redundancy to prevent disruption<sup>65,66,67</sup> — while bouncing forward is more concerned with managing uncertainty.<sup>68</sup> Something that, according to Välikangas and Lewin<sup>69</sup> primarily takes «courageous experimentation and doing things differently» to «practice requisite variety». In contrast to robustness and redundancy, which reinforce the status quo, experimentation actively challenges it and allows us to explore potential new normals without the need of encountering disaster first.

<sup>65</sup> Michel Bruneau et al. 'A Framework to Quantitatively Assess and Enhance the Seismic Resilience of Communities' (2003), pp. 733–752

<sup>66</sup> Stephanie E Chang and Masanobu Shinozuka. 'Measuring improvements in the disaster resilience of communities' (2004), pp. 739–755

<sup>67</sup> A Rose. 'Economic resilience to natural and man-made disasters: Multidisciplinary origins and contextual dimensions' (2007), pp. 383–398

<sup>68</sup> Liisa Välikangas and Arie Y. Lewin. 'The Lingering New Normal' (2020), pp. 467–472

<sup>69</sup> *ibid.*



# ***Situated Speculation***



Envisioning future crises and post-crisis futures is a speculative endeavour. We can not say with certainty how they will play out. But we also do not have to fall back on plucking things out of thin air. Instead, we can ground our assumptions of what is going to happen in our experience and knowledge. For instance, take climate modelling: We have a pretty clear picture of past and current greenhouse gas emissions and their atmospheric concentration. Except for some more intricate processes like the CO<sub>2</sub> fertilisation effect, we also have a good understanding of the physics of climate change.<sup>70</sup> By far, the most significant cause for uncertainty in the climate crisis comes from socioeconomics and essentially boils down to factors like population growth, land use, inequalities, technological advancements, and mitigation and adaptation policies.<sup>71</sup>

Here, scenarios come in, which, in climate research, are covered by the SSP-RCP framework consisting of five <Shared Socioeconomic Pathways> (SSPs) that can be mixed and matched with <Representative Concentration Pathways> (RCPs). The former set the broad socioeconomic context ranging from a sustainable world with social, economic, and technological progress to a world of <regional rivalry> with continued population growth and limited international cooperation, the latter aim for specific greenhouse gas concentration levels that roughly translate into global warming targets and thus present alternatives to the baselines set by the SSPs.<sup>72</sup> On top of

<sup>70</sup> Volkholz and Thomet, *Extreme Events*, op. cit.

<sup>71</sup> Elmar Kriegler et al. *Primer to Climate Scenarios*. 2020

<sup>72</sup> *ibid.*

that, there is a range of scenarios evaluating different strategies like taking immediate versus delayed action<sup>73</sup> or using land for afforestation versus bioenergy production.<sup>74</sup> This adds up to 416 scenarios currently hosted in the IAMC 1.5°C Scenario Explorer<sup>75</sup> which holds the scenarios referred to in the <IPCC Special Report on Global Warming of 1.5°C><sup>76</sup> and <IPCC Special Report on Climate Change and Land><sup>77</sup> – not counting any climate and climate impact scenarios that follow in the modelling chain.

Futurologists commonly illustrate scenarios using the <futures cone><sup>Fig. 5</sup> which takes the tip of the cone as <now> and the base as a space of future possibility. Within that, a slightly narrower area containing plausible futures which again encompass probable and somewhat offset to that preferable ones.<sup>78,79</sup> A multitude of scenarios makes uncertainties more manageable. Assumptions fill in for the things we do not know and allow us to explore different futures before setting course for the more favourable ones through policymaking, investment strategies, lifestyle choices, and the like. However, it does not always take multiple scenarios. A single scenario might be persuasive enough to provoke change: News reports of COVID-19 projections that showed a surge in cases had been attributed to affect peoples behaviour.<sup>80</sup> So, what makes a scenario actionable?

Halewood<sup>81</sup> identifies three primary forms of speculation. Firstly, traditional speculation, which he puts close to imagination. It does not consider all available facts and is there-

73 Christoph Bertram and Jonas Parnow. *Closing the Emissions Gap*. 2020

74 Florian Humpeöder et al. *The Role of Land for Food Production and Climate Protection*. 2020

75 Daniel Huppmann et al. *IAMC 1.5°C Scenario Explorer and Data hosted by IIASA*. version 2.0. 2019

76 IPCC. *Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. 2018

77 IPCC. *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems*. 2019

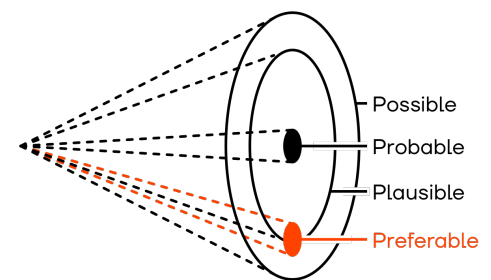


Fig 5 The Futures Cone, adapted from Hancock and Bezold, 1994

78 Trevor Hancock and Clement Bezold. 'Possible futures, preferable futures.' 1994, pp. 23–29

79 Joseph Voros. 'Big History and Anticipation Handbook of Anticipation: Theoretical and Applied Aspects of the Use of Future in Decision Making'. Ed. by Roberto Poli. Cham: Springer International Publishing, 2017, pp. 1–40

80 Derek Thompson. 'Why So Many Pandemic Predictions Failed' (2021)

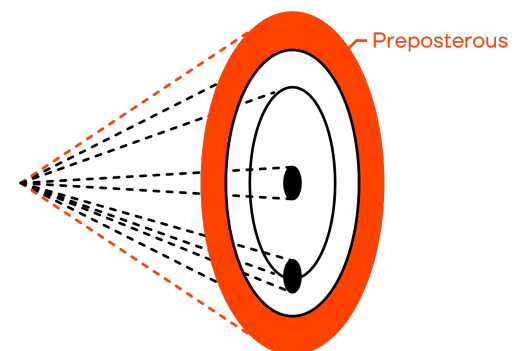


Fig 6 A Futures Cone with an additional outer circle representing <preposterous> futures, adapted from Voros, 2017

81 Michael Halewood. 'Situated speculation as a constraint on thought Speculative Research'. Routledge, 2017, pp. 70–82

fore not restricted to what is strictly possible. For example, some incarnations of the future cone include a wider cone to hold <preposterous> futures.<sup>82</sup> I struggle with these particular depictions<sup>Fig. 6</sup> since they suggest that the <possible> lies within the <preposterous> and that there is a boundary to the <preposterous>. But with traditional speculation, we might quickly end up there, which makes it easy to dismiss anything coming out of it.

Secondly, scientific speculation,<sup>Fig. 7</sup> «which generates hypotheses that are to be tested in the future».<sup>83</sup> While the former was too wide to act upon, this one is too narrow. We can only prove or disprove certain outcomes, but we can not shape them as it «only treats the world as exhibiting an order that lies in wait to be discovered».<sup>84</sup>

Finally, by drawing on Haraway's notion of situated knowledges,<sup>85</sup> Halewood determines situated speculation.<sup>Fig. 8</sup> Here, speculation «arises in relation to a specific ground (or problem) which is the starting point for the <jump> of speculation, and also recognises the conditions that this ground places on such a jump».<sup>86</sup> The specific ground holds the facts that describe it in its current state — or to say it with Wittgenstein: «The world is all that is the case»<sup>87</sup> — which entails our capacity to shape it moving forward. During a crisis, the <jump of speculation> quickly becomes a bounce towards a new normal

82 Voros, 'Big History and Anticipation Handbook of Anticipation: Theoretical and Applied Aspects of the Use of Future in Decision Making', op. cit.

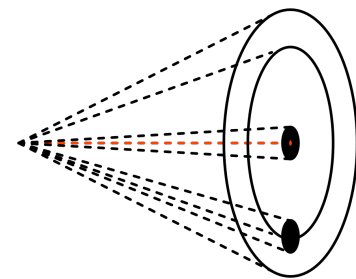


Fig 7 A Futures Cone for scientific speculation

83 Halewood, 'Situating speculation as a constraint on thought Speculative Research', op. cit.

84 ibid.

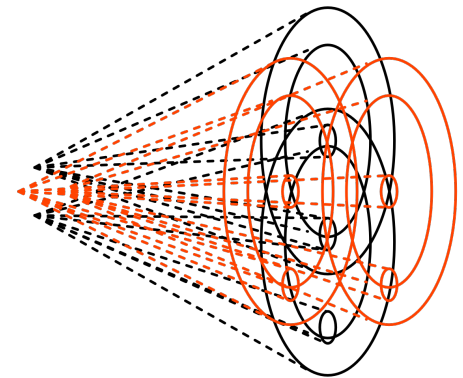


Fig 8 A Futures Cone for situated speculation

85 Donna Haraway, 'Situating Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective' (1988), pp. 575–599

86 Halewood, 'Situating speculation as a constraint on thought Speculative Research', op. cit.

87 Ludwig Wittgenstein. *Tractatus Logico-Philosophicus*. Routledge, 2001

Recognising a <specific ground> also means appreciating that there is a multitude of grounds — or worlds or normals or perspectives — to start from and to not fall for «the god trick of seeing everything from nowhere».<sup>88</sup> In the context of a crisis, this means recognising that different people and communities have other starting conditions — some of which come with increased vulnerability — and therefore require different paths out of the crisis. For the future cone, it means that we need multiple <nows> propagating into potentially overlapping but never fully converging possible, plausible, probable, and preferable cones.

## **Speculative Design**

While the future cone quickly adapts to Hollywoods three forms of speculation, attributing actual speculative practice to one of them proves to be much more challenging. In climate change scenarios, we find scientific speculation when it comes to the less-understood physical processes. Simultaneously, in favour of reducing complexity, they do not consider all the available facts. Nonetheless, the scenarios are fundamentally grounded in current and account for varied starting conditions. Admittedly the IAMC 1.5°C Scenario Explorer only acknowledges five world regions,<sup>89</sup> but there are also efforts to scale these scenarios into local and more actionable contexts.<sup>90</sup> The same goes for speculative design, which meanders between traditional and situated speculation.

<sup>88</sup> Haraway, 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', op. cit.

<sup>89</sup> Huppmann et al., *IAMC 1.5°C Scenario Explorer and Data hosted by IIASA*, op. cit.

<sup>90</sup> Sara Talebian et al. *Co-Producing Adaptation Options to Address Future Cross-Border Climate Impacts*. 2020

Speculative design, critical design, design fiction, etc., describe closely related design practices, and the terms are to some extent used interchangeably.<sup>91,92</sup> The practices draw on radical architecture and fine art from the 1960s and 1970s<sup>93</sup> and have been primarily brought into the field of design — particularly into the design interactions programme at the London Royal College of Art — by Dunne and Raby to contrast traditional and often commercially driven design.<sup>94</sup> The different terms emphasise specific aspects of speculative and critical design practices. However, for simplicity's sake and as I am primarily concerned with the speculative dimensions of these practices, I will refer to them as speculative design throughout this thesis.

Arguably, design is always aimed towards the future. But following market logics, it is typically more interested in the probable future, whereas speculative design attempts to diverge from this path to question the status quo. This re-orientation is less about applying a new methodology than about adopting a new attitude to design.<sup>95</sup> Johannessen<sup>96</sup> describes speculative design in three steps — <define a context for debate>, <ideate and find problems, and create a scenario>, and <materialize the scenario to provoke an audience> — which easily translates to traditional design if one replaces <scenario> with <use case> and thinks of the audience as a group of investors.

Scenarios and use cases are not far from another. We can understand a scenario as the

<sup>91</sup> Leon Karlsen Johannessen. 'The Young Designer' s Guide to Speculative and Critical Design' (2017)

<sup>92</sup> Ivica Mitrović, Marko Golub and Oleg Šuran, eds. *Introduction to Speculative Design Practice*. Zagreb/Split: HDD & DVK UMAS, 2015

<sup>93</sup> Anthony Dunne and Fiona Raby. *Speculative everything: design, fiction, and social dreaming*. MIT press, 2013

<sup>94</sup> Johannessen, 'The Young Designer' s Guide to Speculative and Critical Design', op. cit.

<sup>95</sup> Dunne and Raby, *Speculative everything: design, fiction, and social dreaming*, op. cit.

<sup>96</sup> Johannessen, 'The Young Designer' s Guide to Speculative and Critical Design', op. cit.

context for a use case. For instance, the use case for an app to look up connections and book train tickets exists in a scenario where a person wants to travel from Berlin to Zurich. More implicitly, there must also be a train connection and a device that runs apps. In traditional design, the scenario is given and typically does not differ much from the existing status quo. Speculative design essentially turns the scenario into the design subject. The frequent appearance of the future cone in speculative design literature accentuates this transformation.<sup>97,98,99</sup>

Dunne and Raby<sup>100</sup> reason for scenarios that «should be scientifically possible». At the same time, «everything else — ethics, psychology, behavior, economics, and so on — can be stretched to the breaking point», which would position scenarios right at the edge of what is possible. But there is a second restriction as «there should be a path from where we are today to where we are in the scenario», which they conceive as «a believable series of events that led to the new situation». With this framework in mind, we can return to whether we can consider speculative design situated and — more importantly — if it should be.

«Scientific possibility» and a «believable path» put some constraint on speculation. Is it enough to ensure it takes all available facts into account? Scientific possibility does not necessarily restrict itself to what is possible in a social system. As discussed earlier, change requires capacity for change. Something that is also not

<sup>97</sup> Dunne and Raby, *Speculative everything: design, fiction, and social dreaming*, op. cit.

<sup>98</sup> Johannessen, 'The Young Designer' s Guide to Speculative and Critical Design', op. cit.

<sup>99</sup> Mitrovic', Golub and S'uran, *Introduction to Speculative Design Practice*, op. cit.

<sup>100</sup> Dunne and Raby, *Speculative everything: design, fiction, and social dreaming*, op. cit.

fully covered by the quest for a believable path, which according to Dunne and Raby<sup>101</sup> follows the purpose to make scenarios relatable to the audience and serve them «as an aid for critical reflection». This could easily take a contra-factual route.

101 *ibid.*

What is possible and what we consider believable depends on where we stand — the specific ground from where we jump. To say that «there should be a path from where we are today to where we are in the scenario»<sup>102</sup> suggests that there is common ground and ultimately fails to recognise the unevenly distributed conditions that currently exist. The multitude of speculative design practitioners who inherently bring in their perspectives mitigate this to some degree. Still, they mainly root in white European middle-class privilege<sup>103</sup> and by dismissing issues of race, class, and gender exclude less privileged perspectives from perceptions of the future.<sup>104</sup> This issue extends well beyond the boundaries of speculative design and design generally. But by positioning itself as a critical practice with at least some claim to challenging prevailing power structures, speculative design must also discuss its own inadequacies and question «who has the right, role and agency to imagine a different future».<sup>105</sup> To situate speculation by recognising its ground and subsequent conditions is the first step in this direction — to reflect diverse starting points and to not only jump into a multitude of futures but also from a multitude of nows is a necessary second.

102 *ibid.*

103 Matt Ward. *Do we need more critiques of Critical and Speculative Design?* 2019

104 Luiza Prado de O Martins. 'Privilege and oppression: Towards a feminist speculative design' (2014)

105 Ward, *Do we need more critiques of Critical and Speculative Design?*, *op. cit.*



## Towards Situated Speculation

Approaches to involving more diverse perspectives exist in speculative design research and practice. For example, the Leimert Phone Company,<sup>106</sup> a Los Angeles based design collaborative, is interested in alternatives to dominant Silicon Valley narratives by employing «public technology for the «commons»». With the «Sankofa City» project, they collaborated with community members and students to imagine preferable futures for their neighbourhood.<sup>107</sup> In addition to physical prototypes and a video, participants created collages<sup>Fig. 9</sup> which mixed imagined futures with — and ultimately situated them in — existing infrastructures.

In response to the killing of Michael Brown by a police officer and subsequent protests in Ferguson in 2014, Gerber<sup>108</sup> worked with community members to imagine «Futures of Public Safety» that present alternatives to policing, which she turned into «scenes» participants could occupy and experience.<sup>Fig. 10</sup> While the case study took place in Ferguson, the resulting scenes lack the direct spatial embedding apparent in the «Sankofa City» project. Here, speculation is primarily situated by integrating the people's perspectives exposed to the existing forms of public safety. However, Gerber diagnoses that «the people most likely to engage were not always those most impacted» and that her interpretations of their perspectives did not necessarily represent them authentically.

<sup>106</sup> Karl Baumann et al. 'Infrastructures of the Imagination: Community Design for Speculative Urban Technologies'. New York, NY, USA Troyes, France: Association for Computing Machinery, 2017, pp. 266–269

<sup>107</sup> *ibid.*



**Fig 9** Self-driving shuttles, Sankofa City; Source: Baumann et al., 2017

<sup>108</sup> Alix Gerber. 'Participatory speculation: futures of public safety'. 2018, pp. 1–4



**Fig 10** Future of Hearts and Minds, scene from Futures of Public Safety; Source: Gerber, 2018



In search for speculative forms of reporting hate crime, Gatehouse et al.<sup>109</sup> organised two workshops with LGBT+ young people and criminal justice workers together. Again, speculation is situated through the perspectives of the participants. Then, the project takes a turn to traditional speculation by prototyping <magical> devices<sup>110</sup> and ultimately breaking free from any constraints of the real world. Gatehouse<sup>111</sup> later revisits the project to ground the outcomes through <hauntology.> She asks «how the not-so-distant past and anticipated futures manifest themselves before, after, and during speculation»<sup>112</sup> and argues that any future is haunted by the past, but also by imagined alternatives. While the prototyped futures remain magically impossible, they are justified, for they allow us to return to the problem and find new responses.<sup>113</sup>

This might sound like an easy excuse, but in these three examples, the authors ultimately concluded that «the direct effect on local planning is yet to be seen»,<sup>114</sup> that «wondering doesn't <solve> problems»,<sup>115</sup> and that «we cannot afford to stop here».<sup>116</sup> This only leaves us with two options: Either actualise our imagined futures or keep speculating. For the latter — one could argue — impossibility is not an issue if we «remain committed to problems that exceed our capacity to respond adequately in the present»,<sup>117</sup> but it does keep one from achieving the former.

When we do neither, speculation deteriorates into a futile exercise, which we must avert as it

109 Cally Gatehouse et al. 'Troubling vulnerability: Designing with LGBT young people's ambivalence towards hate crime reporting'. 2018, pp. 1–13

110 *ibid.*

111 Cally Gatehouse. 'A hauntology of participatory speculation'. 2020, pp. 116–125

112 *ibid.*

113 *ibid.*

114 Baumann et al., 'Infrastructures of the Imagination: Community Design for Speculative Urban Technologies', *op. cit.*

115 Gatehouse, 'A hauntology of participatory speculation', *op. cit.*

116 Gerber, 'Participatory speculation: futures of public safety', *op. cit.*

117 Gatehouse, 'A hauntology of participatory speculation', *op. cit.*

does not do justice to the participants. Ward<sup>118</sup> argues for «some form of <aftercare> [...] analogous to how manufacturers have services to deal with damages, faults and repairs». Here, it is interesting to turn to the web. Particularly to two projects, <Cartographies of Change><sup>119</sup> and <The Parliament of Species>,<sup>120</sup> that offer space for speculation and an archive that preserves imagined futures in a way that is accessible for organisers, participants, and outsiders alike. Additionally, both websites provoke continued speculation by letting visitors rate statements on what has changed by 2030 along the dimensions of probability and desirability (Cartographies of Change) and assess speculative policies others have proposed (The Parliament of Species).

Considering Halewood's definition of situated speculation, the origins of speculative design, and the examples of participatory speculation, I want to propose three rules for situated speculative design:

1. Acknowledge grounds — Speculate about shared futures from various perspectives.
2. Constrain to the possible — Not only in terms of scientific possibility but also systemic capacity.
3. Support continuous speculation — Provide access to speculations, scenarios, and prototypes and allow others to take over.

<sup>118</sup> Ward, *Do we need more critiques of Critical and Speculative Design?*, op. cit.

<sup>119</sup> RIDE Futures. *Cartographies of Change*. 2020

<sup>120</sup> Alexandra Veskoukis et al. *The Parliament of Species*. 2020



# ***New Normal Neighbourhood***

Let us return to the new normals, as it is now time to investigate how we can utilise situated speculative design to virtualise crises and propose responses before they actualise. For that, I created <New Normal Neighbourhood>, a design process and web platform that invites people to imagine the effects of potential future crises on their immediate surroundings.

Amongst many other things, COVID-19 made strikingly clear how quickly and drastically a global crisis can alter how we interact with and perceive our neighbourhood. However, when discussing crises more abstractly — like referring to the climate crisis in terms of global warming levels instead of local impacts — we easily neglect this, increase our psychological distance, and lessen our ability and willingness to act.<sup>121,122</sup> To counteract this, I decided early on to emphasise neighbourhood-level locality, making speculation more relevant and tangible for the participants. It would also go a long way towards situating speculation since the existing conditions would directly unfold in front of them. Thus, I hoped to avoid replicating vague statements such as <increase security>, <reduce emissions>, <or keep calm> in favour of more concrete proposals.

The pandemic and subsequent containment measures also put some constraint on how participatory practice was going to work. Under which restrictions a collaborative workshop could happen at some point in the course of the project was unpredictable. So mov-

<sup>121</sup> Alison Shaw et al. 'Making local futures tangible —Synthesizing, downscaling, and visualizing climate change scenarios for participatory capacity building' (2009), pp. 447–463

<sup>122</sup> Rachel I McDonald, Hui Yi Chai and Ben R Newell. 'Personal experience and the 'psychological distance' of climate change: An integrative review' (2015), pp. 109–118

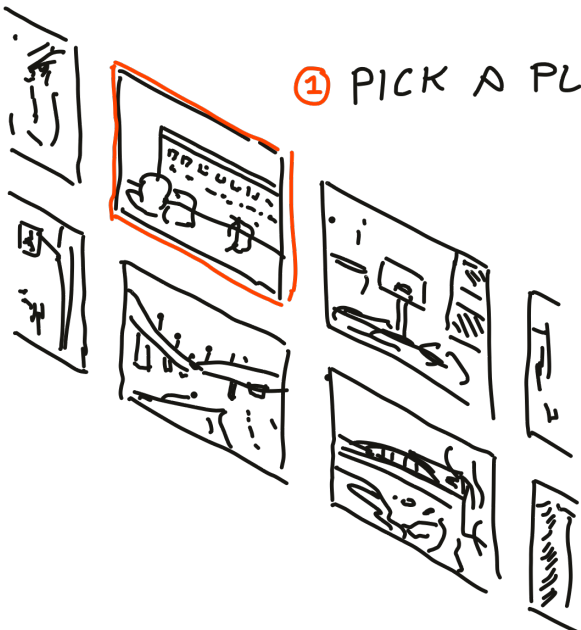
ing the speculative process into a dedicated app seemed highly promising. It would remove tempo-spatial barriers and allow for continuous speculation. Optimised for mobile devices, it would also enable in-situ speculation on the go and access to a phone's sensors for their geolocation and camera.

Process and app evolved over several iterations, from an early conceptual sketch to the published prototype. The following pages will illustrate my design and development process along its major stages before taking a closer look at participants' responses.

## **A Rough Idea**

The first draft of the project did not yet incorporate the notion of new normals or crisis. Instead, it was primarily interested in bringing high-level scenarios — such as an ageing population or an increased demand for crops due to bioenergy production — to the local scale. The process was in part inspired by the urban analysis methods employed in the preparation of the fourth CIAM congress in 1933<sup>123</sup> where existing maps were augmented by adding additional layers of information. Therefore, I opted to apply a similar technique to annotate places that would cause issues under the given scenario on the map and sketch an imagined response as a picture of such a place.

<sup>123</sup> Evelien Van Es. *Atlas of the functional city: CIAM 4 and comparative urban analysis*. Thoth Publishers, 2014

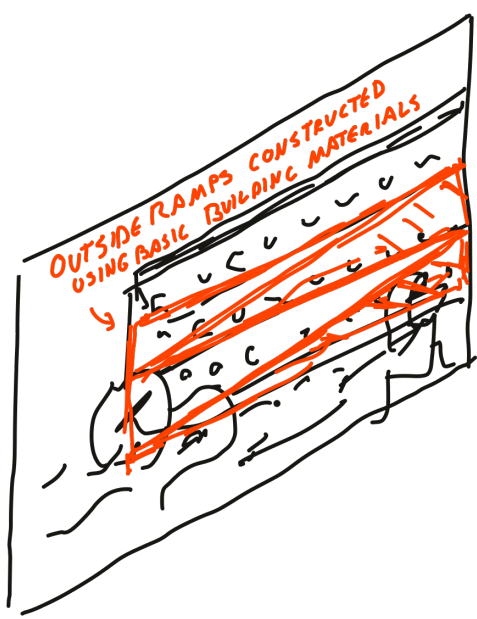
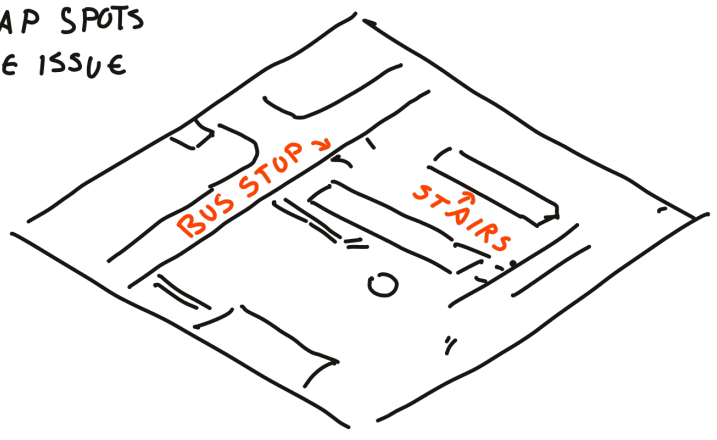


① PICK A PLACE

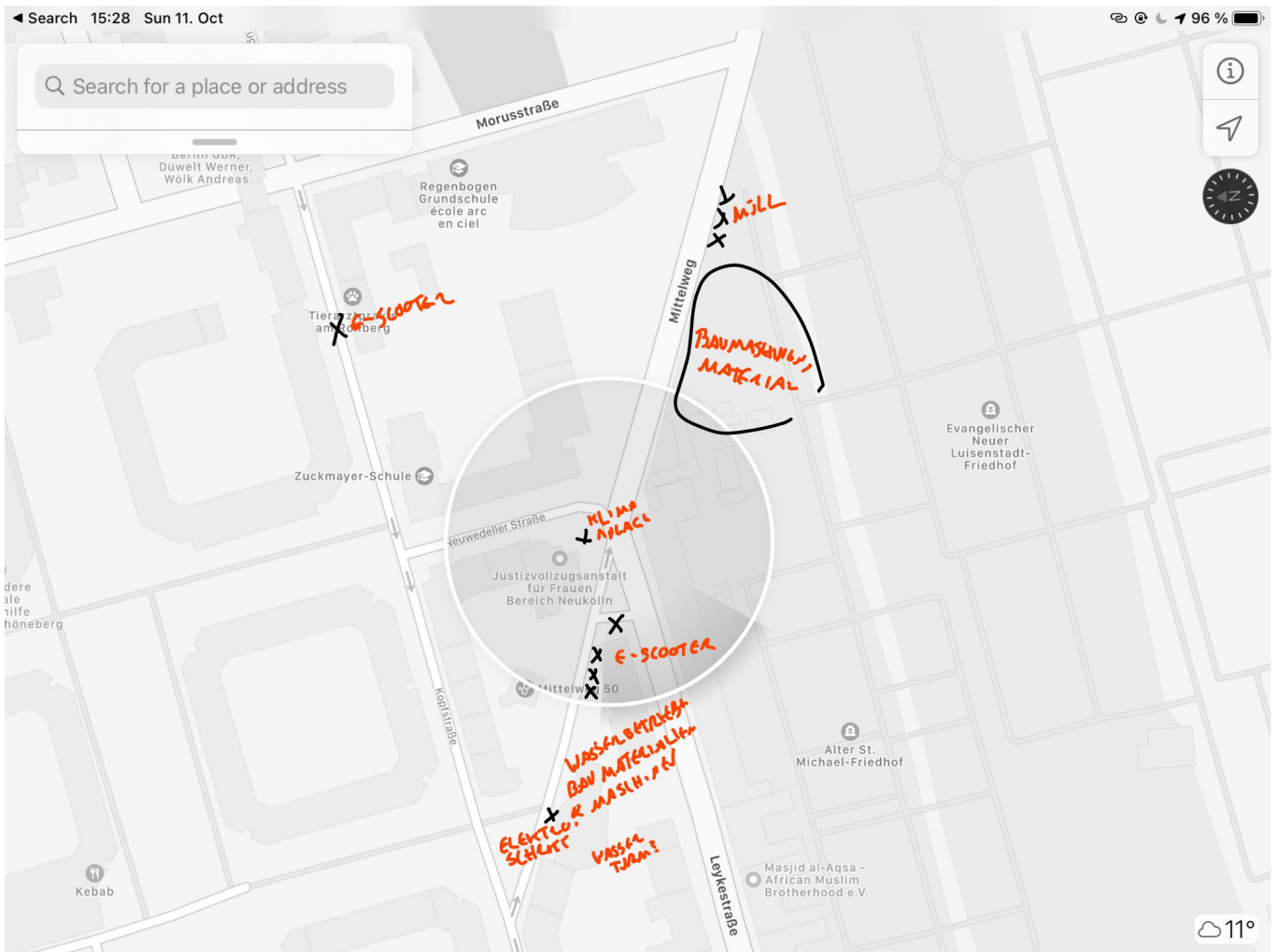


② NOTE THREE EFFECTS THE TREND MIGHT HAVE ON THIS PLACE

③ EXPLORE YOUR SURROUNDINGS. MAP SPOTS RELATED TO THE ISSUE



④ CHOOSE A PERSPECTIVE SKETCH HOW THIS PLACE WILL LOOK UNDER THE SCENARIO



## New Ground

It quickly became apparent that I could not develop a process for spatially situated speculation without practising it myself. So, in a first attempt, I picked <energy price shock> from the World Economic Forum's Global Risks Report 2020<sup>124</sup> for my scenario and a location in Berlin Neukölln, not far from where I live.

<sup>124</sup> World Economic Forum. *The Global Risks Report*, 2020. 2020, p. 94

By essentially looking out for anything requiring energy and denoting it on the map, I swiftly completed the first part of my self-set task. The second proved to be much more intricate. I struggled with interpreting the scenario





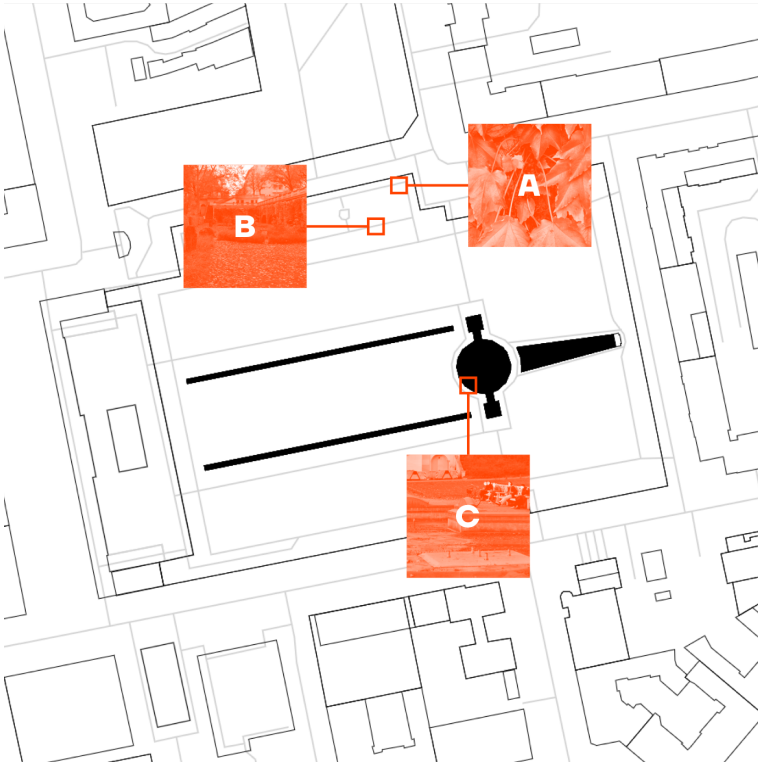
— a shock can imply either crashing, surging, or highly fluctuating prices — but I also felt that the place was perhaps not particularly suited for speculation. As a result, I lost my own ground since my speculation did not represent what I deemed probable nor preferable.

**Scenario**

# Food Security is at Risk

**Berlin Neukölln**

# Körnerpark



**Analysis**

**A → Grapes**

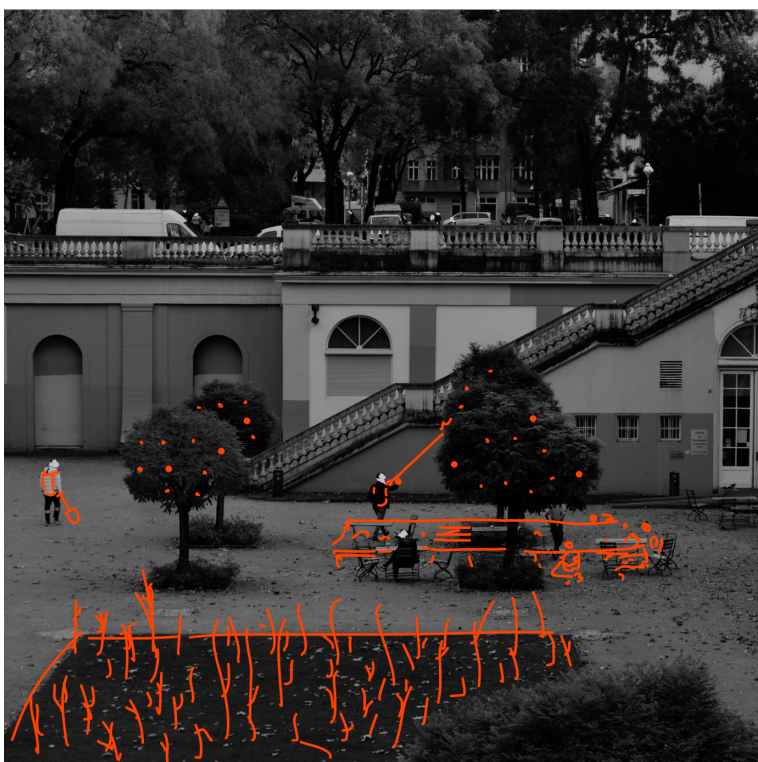
Urban foragers will discover them as a valuable resource

**B → Lawn**

Will be used as cropland

**C → Fountain**

Will be used as a basin to store water



**Projection**

Körnerpark is used for food production and processing

**Do you want that?**

No, while it's nice to produce food locally it's not worth the loss of public space.

**What can you do to prevent that?**

Reduce food waste and make dietary changes

## Report

To address some of the earlier issues, the next iteration focused on achieving a successful outcome. Accordingly, I opted for more approachable high-level scenarios, emphasised the speculator's position, and entertained the idea to limit speculation to a fixed location to increase comparability across speculations.

The process lost some of its linearity in this approach: I constantly switched between sketching and writing and between the analytical and the speculative section. This ultimately made for a more coherent report, but it would not be easy to support this behaviour within the boundaries of an app.

The prospects of codifying the process in an app made me also discard the idea of offering only a fixed set of locations. Inevitably, this would significantly reduce the number of potential participants — especially under lockdown measures — and posed the question of how much time people were willing to spend. Ultimately, this led me to cut down the analytical section in favour of speculation and, so I hoped, to motivate people to repeat the process with different scenarios and in other contexts.

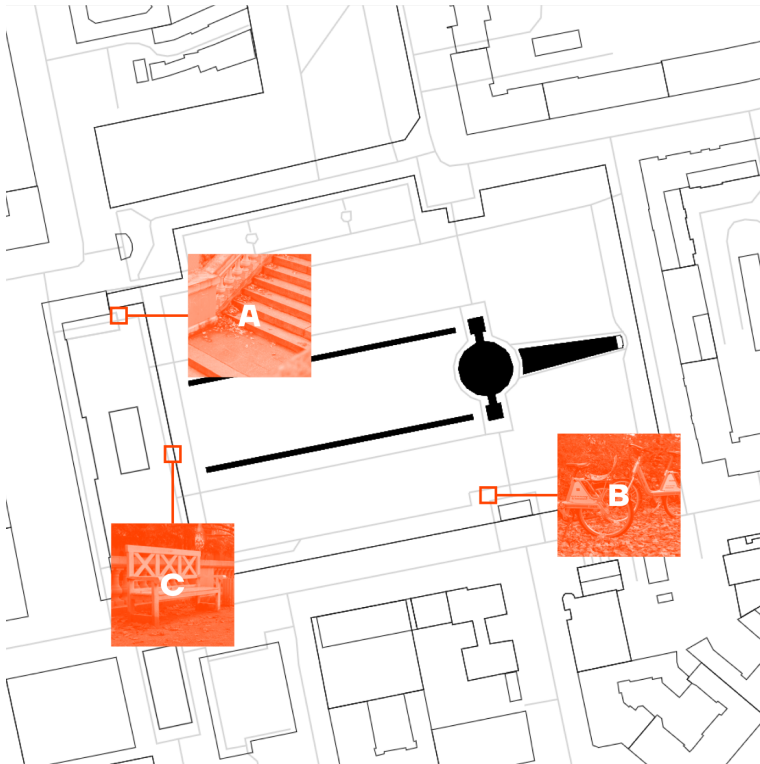


**Scenario**

# Ageing Population

**Berlin Neukölln**

# Körnerpark



**Analysis**

**A → Stairs**

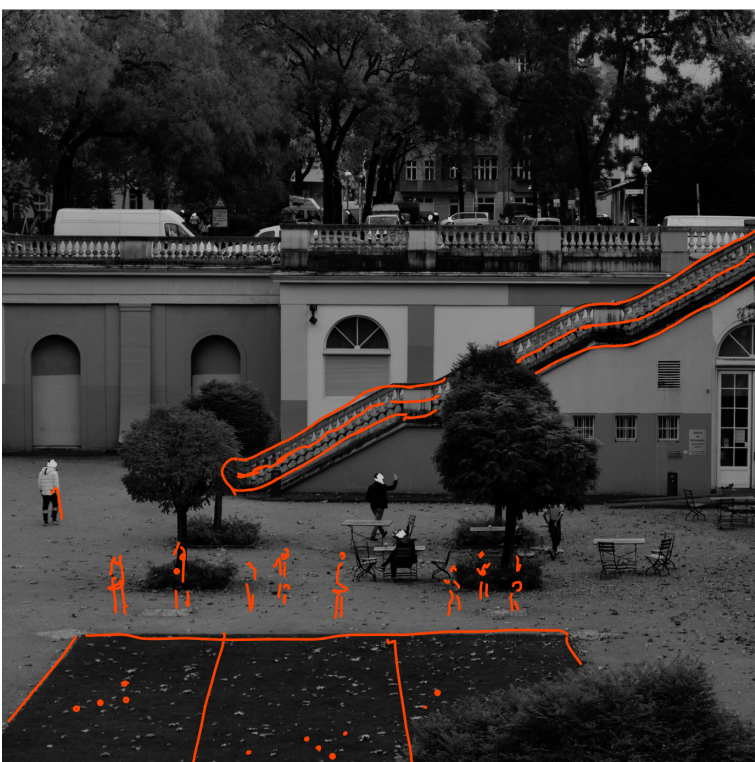
Will need to be replaced with accessible alternatives

**B → Rental Bikes**

Need to become electrified

**C → Park Bench**

Demand for them increases



**Projection**

Körnerpark becomes a more accessible space where old and young can meet

**Do you want that?**

Yes, as long as structural changes are done respectfully

**What can you do to make it happen?**

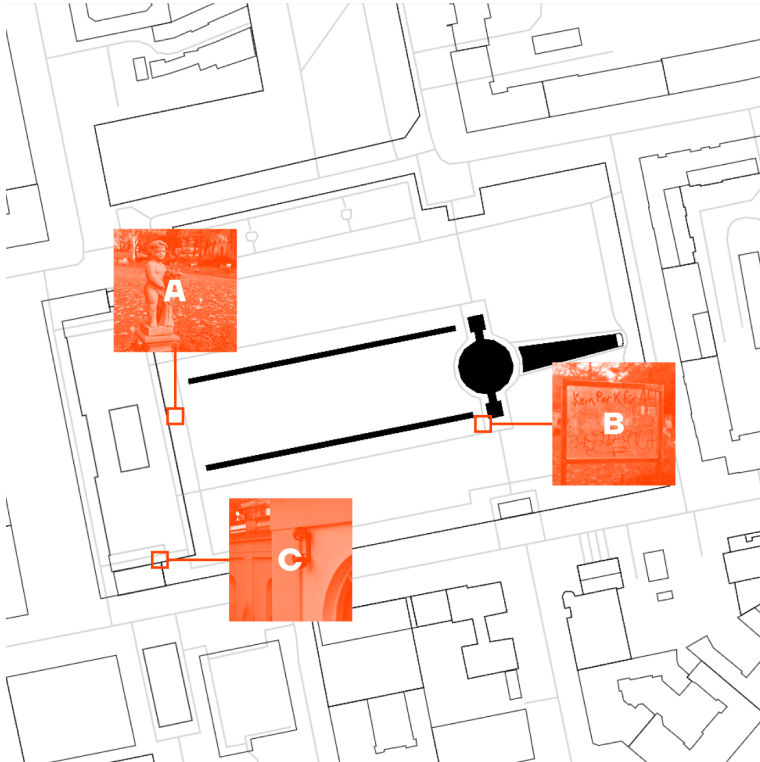
Talk to elderly people in the neighbourhood and recognise their needs

**Scenario**

# Rise of Authoritarianism

**Berlin Neukölln**

# Körnerpark



**Analysis**

**A → Statue**

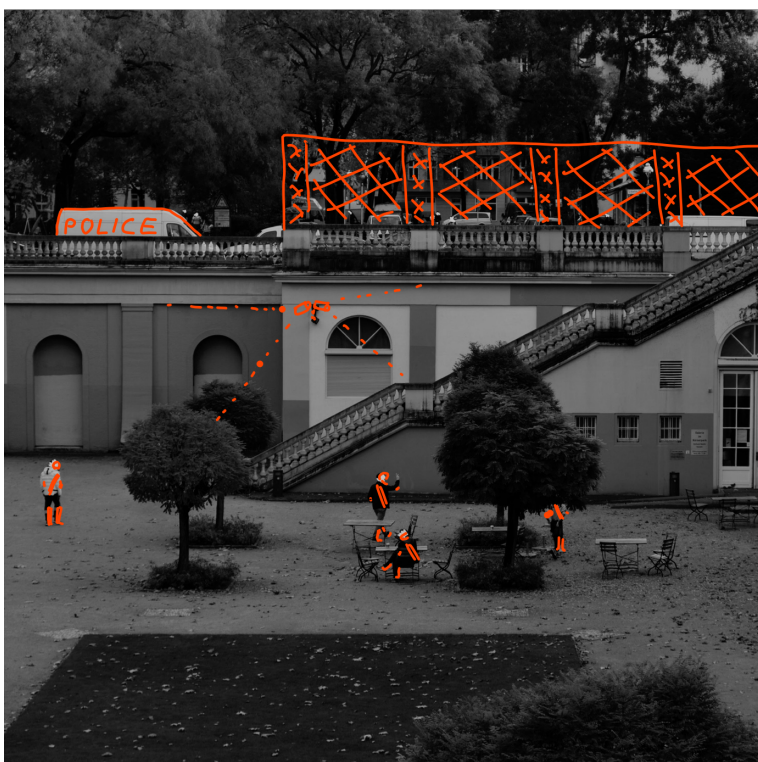
A police officer takes that position

**B → «Kein Park für AfD» written on sign**

Anti-authoritarian and anti-fascist are removed instantaneous, writing them is heavily sanctioned

**C → Light**

Will be replaced with an array of surveillance cameras



**Projection**

Cameras and police officers will survey Körnerpark to suppress the formation of any opposition

**Do you want that?**

No

**What can you do against that?**

Protest, take part in democracy, and reclaim public space



## Questionnaire

With a preliminary process in place, I went on to do my first real test involving someone other than me. The primary aim was to check if they could complete the process autonomously and yield the desired result. For that, I created a form with information on the project, an introduction into the overarching scenario, two constraints — <focus> and <agenda> — to steer the speculation, and a series of questions. The survey also requested to take a photo but skipped annotating it, as I could not yet provide an adequate interface for this.



::: HERE, EVERYTHING IS STILL POSSIBLE :::

Hi, I want to invite you to speculate about the future of your neighbourhood. It shouldn't take more than 10 minutes, but you'll need to be outside for parts of it. Which you can easily combine with a nice walk.

This is not about predicting the future but about speculating how potential global future impacts your neighbourhood. What follows is a short introduction into said global future, a focus, and an agenda. These will guide through the subsequent tasks.

::: FUTURE :::

2040 – RESOURCE SCARCITY – For decades, economic progress relied on unsustainable resource management. Living beyond our planetary boundaries depleted the very resources our lifestyles and infrastructures depend on. Today, there's a surge in conflicts about remaining resources including water, minerals and electricity. But there have also been huge advancements towards a circular economy, recycling materials, and eliminating waste.

::: FOCUS :::  
Moving objects

::: AGENDA :::  
Protect resources

::: TASKS :::

Take the first step into the future and look around. How does it feel? scary? hopeful? [please provide a single word answer]

dusky

---

It's time to head outside now. Start walking. A lot has changed and it might be hard to take in all at once. So keep your focus in mind. When you found something interesting that fits your focus take a picture and note what it is.

snow

---

Why did you choose that object? How is it affected by the future?

I heard cars and church bells in the distance, but besides planet Earth and my own clothes, snow was the only visible object that was moving.

There might be less snow in the future, but since Global Warming leads to more extreme

---

Following the Agenda, how does the object adapt to the new circumstances?

Protecting resources protects snow as well, which itself is a natural resource (water reservoir,

The moving object snow (falling flakes, crawling glaciers) has the potential to alter our own

---

Thinking about your questions during my walk, I slipped on the fresh snow.

---

Thank you for participating! Please send me the filled out form and the picture you took.

⋮  
HERE, EVERYTHING IS STILL  
POSSIBLE  
⋮

Hi, I want to invite you to think about the future of your surroundings. It will only take 5 to 10 minutes, but you'll need to be outside. Let me know when you're ready, and I'll present you with a future scenario. Then it's up to you to speculate how that affects what you see. But don't worry. I'll guide you through the process.

Are you ready?

Ready to start!

⋮  
FUTURE  
⋮

2040 – RESOURCE SCARCITY

For decades, economic progress relied on unsustainable resource management. Living beyond our planetary boundaries depleted the very resources our lifestyles and infrastructures depend on. Today, there's a surge in conflicts about remaining resources including water, minerals and electricity. But there have also been huge advancements towards a circular economy, recycling materials, and eliminating waste.

⋮  
First Step  
⋮

Now, take your first step into this world and look around. How does it feel? scared? hopeful? [please provide a single word answer]

diverse

Well, I think it's worth to explore this future a bit more thoroughly. It is hard to take all that in at once. Let's focus on specific objects.

⋮  
FOCUS  
⋮  
Look for moving objects.  
⋮

Continue walking. Find something that's affected by the scenario and fits your focus. When you found something, take a picture and send it to me.

You can take your time with this one!



Interesting. Looks like a fence to me, what is it?

On the right a lot of small gardens, on the left a tobacco factory.

Ah, now I see! I wonder what happened it to it. Why did you choose that object? How is it affected by the scenario?

The gardens are supposed to play an important role for the community living around and for clean air, the factory will have to abandon production of cigarrrets and will be open for new forms of work and living.

⋮  
AGENDA  
⋮  
Protect resources  
⋮

How would the object need to change to follow that agenda?

The factory now is dependend on dozens of lorries going in and out every day. Thus kind of production should leave. The gardens hopefully will be kept as kind of green oasis in a district with rapid growing of population.

⋮  
Thank you very much for your contribution! Are you up for another speculation with a new modifier and agenda?  
⋮  
[Restart]  
[Another time]



## **Chat**

For a test with a second participant, I took on the role of a chatbot to bring the experience to the mobile phone and strictly enforce linearity while leaving the overall process essentially unchanged.

In both cases, the test participants did successfully complete the survey, but with <snow> and <allotments and a factory> chose entirely unexpected objects that did not fully fit the questions that followed. Moreover, in follow-up interviews, the participants expressed some confusion concerning the constraints (chat), about whether they were supposed to imagine themselves in the future while answering (questionnaire), and the overall purpose of the exercise (both). The latter I found somewhat distressing but figured that I could resolve that by providing participants with more context and the option to explore existing speculations before issuing their own.

M...ile M...ile



M...ile M...ile M...ile M...ile M...ile M...ile M...ile M...ile



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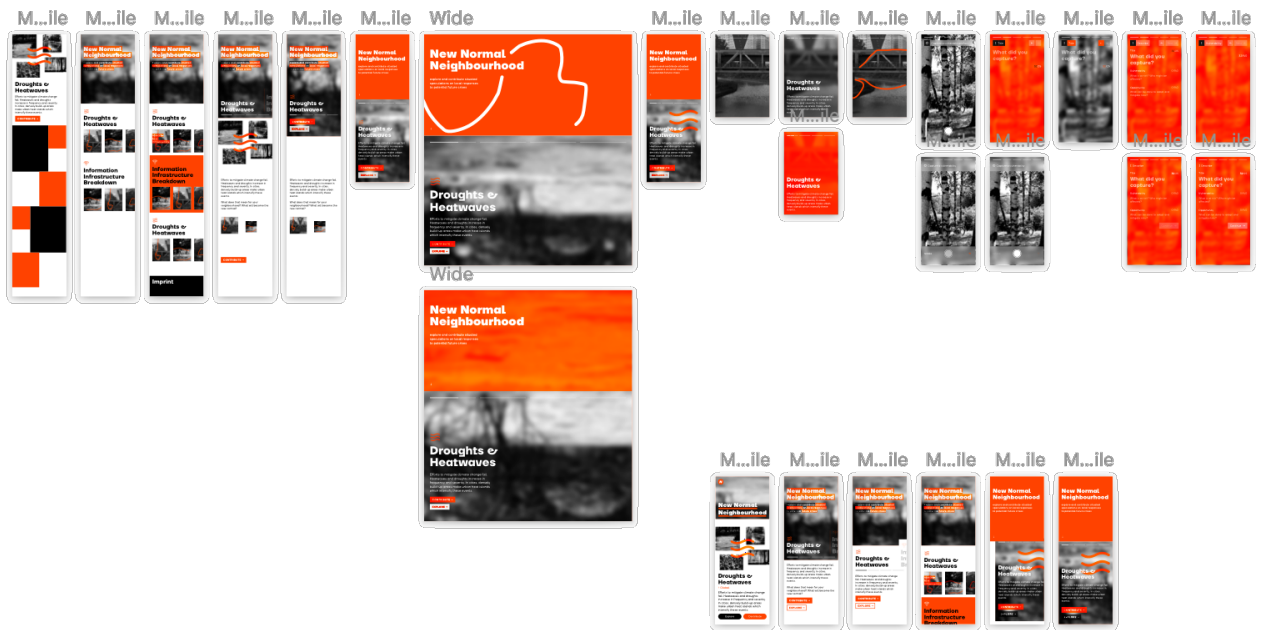
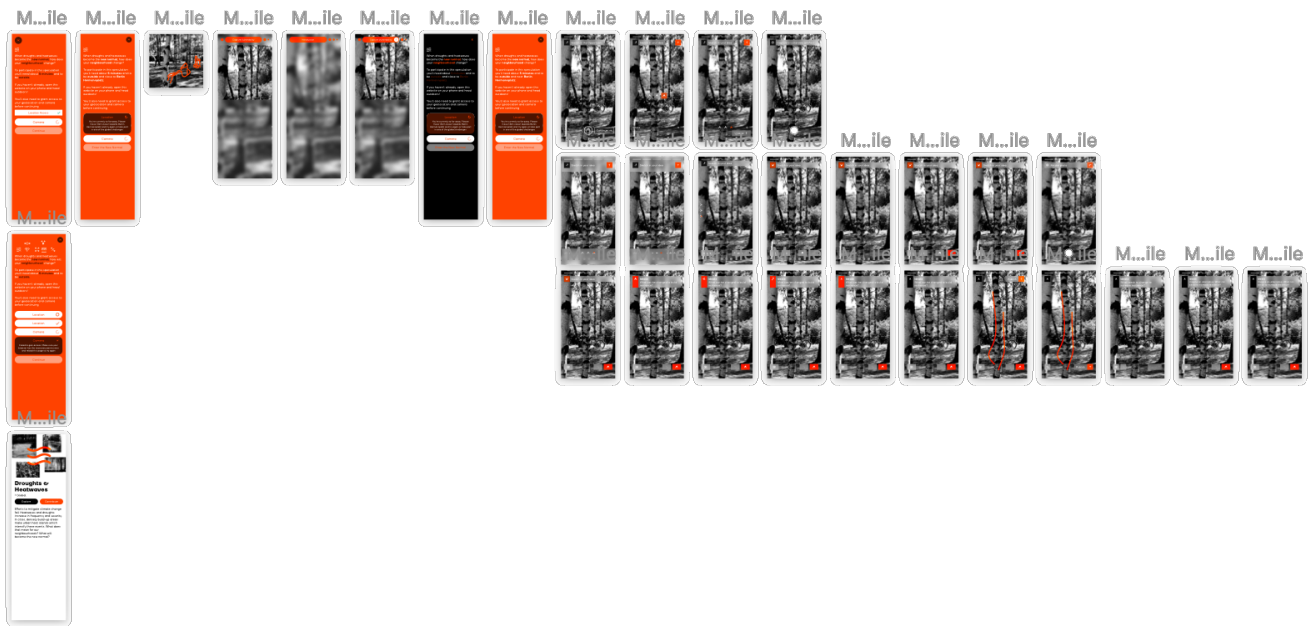


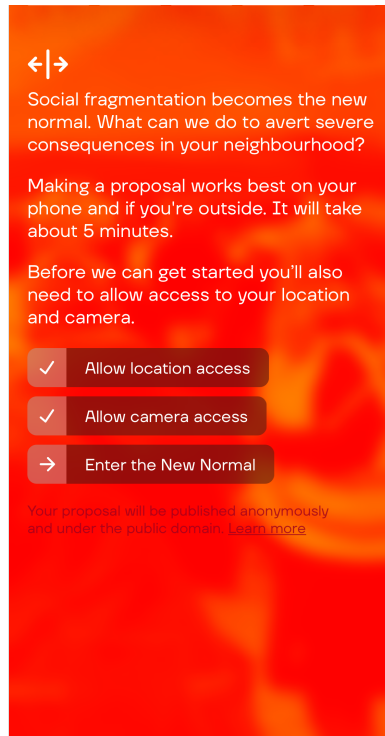
M...ile M...ile



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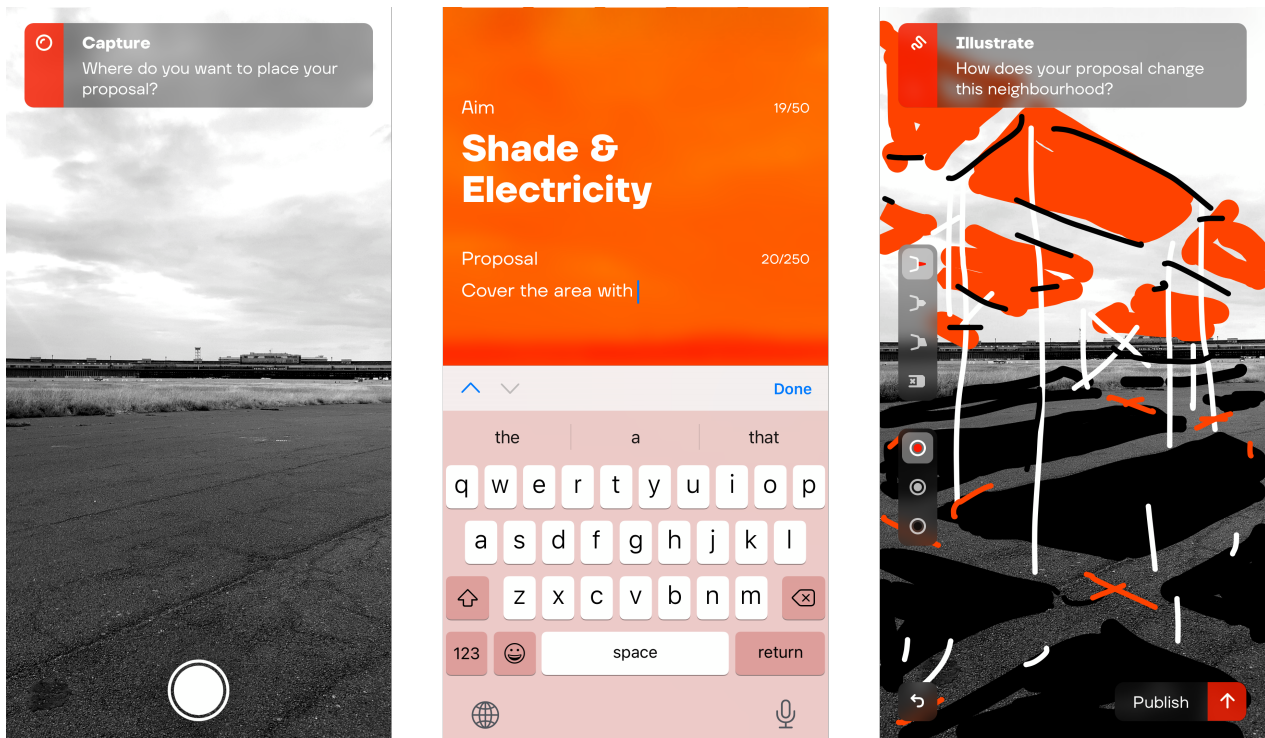


## App

Based on the portrayed iterations, I ultimately conceived a step by step process that situates participants in future new normals and asks for speculative proposals for mitigation and adaptation. I further refined the process alongside the development and testing of the app, which also offers project details and a gallery to explore submitted proposals.

It goes like this:

First, pick one of three crises — information infrastructure breakdown, droughts and heatwaves, and social fragmentation — as the setting for your speculative proposal. Then, the app provides you with some details on the process and requests access to the phone's camera and geolocation before inviting you to enter



the new normal. Your first steps might be a bit shaky, but do not worry. There is someone to fill you in while you explore your neighbourhood in a new light. Then, when you got the hang of it, it is your time to act. Find a suitable spot for intervention, take a picture, describe and illustrate your proposal, and finally submit it.

The app makes a clear distinction between the existing condition — kept in black and white — and the imagined future — accentuated in orange, whereas blurred elements convey the notion of uncertainty. The frontend, which is primarily optimised for mobile devices, is written in Vue.js.<sup>125</sup> Crises and proposals are stored in MongoDB<sup>126</sup> and accessed through restify.<sup>127</sup> The complete source code is publicly available under the MIT License<sup>128</sup>. All proposals, including description, photos, and illustrations, are public domain.

<sup>125</sup> <https://vuejs.org>

<sup>126</sup> <https://www.mongodb.com>

<sup>127</sup> <http://restify.com>

<sup>128</sup> The repositories for the app and server are available at <https://github.com/fidelthomet/newnormal-neighbourhood> and <https://github.com/fidelthomet/newnormalneighbourhood-server>

22:51



newnormalneighbourhood.org



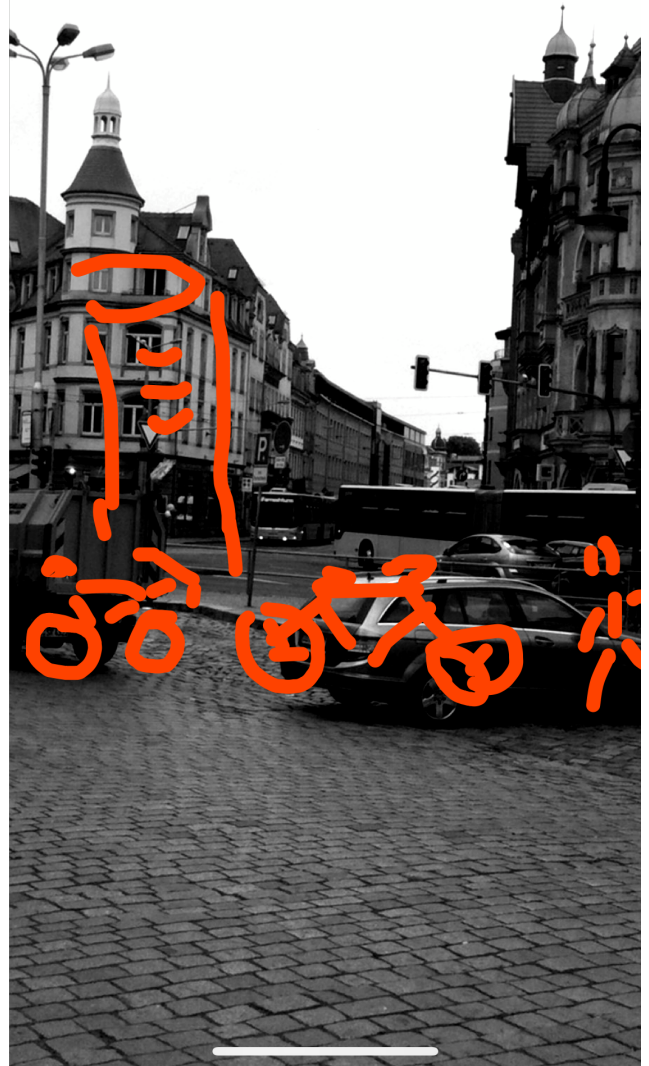
# Info distribution market

Traffic lights are off at the central crossing. No more traffic jams, no more parking lots, but: info messengers with bikes collect information and distribute them all over the city. People from the district meet and talk.

22:52



newnormalneighbourhood.org





## **Responses**

Over the three months since its launch, the prototype could only attract a limited number of responses. I trace that back to a combination of factors such as missing awareness, crisis fatigue, a perceived mismatch between effort and return, a lack of clarity on what it does and how it works, and that the situation one hears about the app is not necessarily the ideal situation to try it out. Still, the proposals that came in are pretty exciting and certainly deliver in providing diverse perspectives. Some call for alternative networks for data transfer, others to head outdoors and explore under information infrastructure breakdown. Trees shall cool down cities, and hikers scout for water in response to drought and heatwave. And social fragmentation is tackled by fostering conversations on the train and by bringing children and seniors together.

22:50



newnormalneighbourhood.org



# More space for decompression

Allow anybody to go on open spaces even if they are private

22:50



newnormalneighbourhood.org





22:52



newnormalneighbourhood.org



# The bravest hikers look for water

Hiking trails have developed from being a health benefit to representing acute danger. However, they allow access to springs and small rivers. What had been a path used for leisure activities has become a place of intense labour for the toughest.

22:52



newnormalneighbourhood.org



22:52



newnormalneighbourhood.org



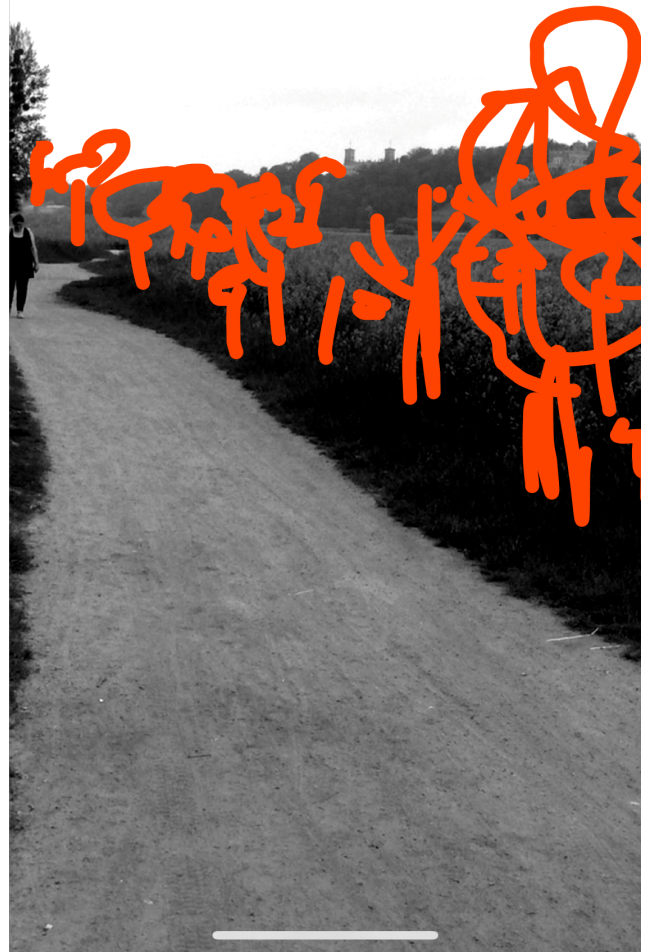
# Forest Banks

The wide banks of the river Elbe can be turned into forests amidst the city of Dresden.

22:52



newnormalneighbourhood.org



22:53



newnormalneighbourhood.org



# Ride time is conversation time

Passengers in trains can benefit from a reduced rate as long as they obey a random reservation system that places them in a compartment together with strangers.

22:53



newnormalneighbourhood.org



# ***Discussion***

In this thesis, I investigated the many notions of new normals, formalised an approach to situated speculative design, and demonstrated a proof of concept for a web platform that enables situated speculative design at neighbourhood-level new normals.

Disasters cause loss, destruction, and grievance. They reveal underlying inadequacies, and while we might yearn to go back to normal — to how things were before — we would set course for repeat calamity. However, disasters also are fertile ground for change. When the most rigid structures start to crumble, there lies opportunity to enter a new normal. One that is potentially more just and less fragile. But this will not be something we inevitably encounter. Instead, it will take a series of choices and the capacity to make them. Building this capacity requires us to embrace an understanding of resilience, favouring jumping forward over bouncing back and managing uncertainty over eliminating it.

As a practice of virtually jumping forward, speculative design allows us to explore alternative normals without encountering disaster first. However, if we want to actualise them — ideally before a crisis strikes — we must constrain speculation to what is scientifically possible and what is feasible considering our capacity. What is more, we must acknowledge that capacity is not evenly distributed and ensure that speculation is not performed from a privileged ground but a variety of perspectives, thus ultimately situating speculative design.



New Normal Neighbourhood is a proof of concept of a situated speculative design process. In the face of potential future crises, the web platform invites participants to experience these new normals and contribute speculative proposals to steer them onto a more preferable path.

## Reflection

Halewood<sup>129</sup> claims that «speculation is only to be judged in terms of its consequences and effects. There is no <right> or <wrong>, <good> or <bad> only what happens next». Proposals on New Normal Neighbourhood range from newly planted forests to alternative forms of communication to questioning ownership and access. Rather unsurprisingly, none of that manifested itself in the urban fabric yet. But does that make them — and consequentially the platform — futile?

This is the trouble with speculation. The chances are high that none of the imagined futures will ever materialise. Still, without them, Gerber<sup>130</sup> argues, «radical reform would not be possible», which translates to reinforcing the status quo and all its inadequacies only to set us up for the next disaster. By situating it, speculation might become slightly less radical and more constrained. But just enough to ensure that it could materialise. In New Normal Neighbourhood, the ground from where we take the jump into speculation is explicit in the backdrop of our proposal.

<sup>129</sup> Halewood, 'Situated speculation as a constraint on thought Speculative Research', op. cit.

<sup>130</sup> Gerber, 'Participatory speculation: futures of public safety', op. cit.

While this makes imagined futures immediately more tangible, there is still a long way to go from articulating to actualising them. In the next step, they must enter discourse and refinement. Providing public access to the proposal and putting them under the public domain, New Normal Neighbourhood lays the foundation for that. However, in its current state, the gallery interface to preview futures is somewhat cumbersome to navigate and does not offer an interface to compare proposals and respond to them. Thereby, it ultimately fails to provide an answer to where such discourse should take place.

By bringing speculative practice to the personal phone, the app promised to adhere to COVID-19 restrictions and reach a wider audience. Unfortunately, in numbers, the prototype has not lived up to that. And while there is some spatial diversity from urban to rural grounds. Yet, it remains questionable if that holds for the participants, as the app does not store any personal data in addition to their location in favour of preserving their privacy. Nonetheless, there is room for improvement in terms of language support and accessibility.

Across the submitted proposals and throughout my design process, the notion of new normals has contributed to fertile ground for speculation. Thinking about the future in terms of potential crises considerably increases the perceived relevancy of such endeavours. Disasters — even imagined ones — reveal inadequacies and demand response — a path towards a new

normal. They make us acknowledge that alternative normals are possible and question if what we consider normal today is actually okay. In the prototype, crises serve as starting points for new normals. Despite their complexity, <information technology breakdown>, <droughts and heatwaves>, and <social fragmentation> are pretty concise and do not require much introduction to provoke speculation on how they impact the participant's surroundings.

## **Outlook**

For bringing situated speculative design and the notion of new normals together, New Normal Neighbourhood is a successful proof of concept. But there is certainly room for improvement. A more refined interface with better support for larger screen sizes could provide new perspectives and insights to the growing set of proposals. To attract new participants, a reworked start page that is more upfront about the app's purpose and, for instance, also shows a selection of existing proposals could go a long way. By providing better support for discourse within the platform, participants might be more inclined to come back. This could include capabilities to rate and comment on proposals. However, I would be more intrigued to explore features to support counterproposals using the same photo or transferring submissions to new places. Ideally, the implementation of such changes runs in parallel to increased testing.



I conceived the app as an alternative to a more classical workshop setting. However, now that in-person workshops slowly become more feasible again, the app could also easily be integrated into one. Furthermore, there also lies potential in tailoring the app towards events by introducing topical new normals and restricting proposals to the duration and location of an event.

Similarly, the app could bring new perspectives into participatory urban planning processes. Exploring the potential of situated speculative design in this context calls for further research. So does its role concerning resilience. The notion of resilience in terms of bouncing forward is relatively young, and what it takes to build this capacity is still open for debate. Perhaps situated speculative practice can have some say in that. From a designers point of view, another set of questions emerges. What does it mean to design for speculation? How should interfaces for speculation look and feel? Should we replicate existing ones and emphasise ease of use, or should we create provocative and radical devices and demonstrate that alternatives to the status quo exist?

## **Conclusion**

New normals are choices. Whether we understand them as states of emerging, permanent, or post-crisis, it is up to us how they turn out. But, if they appear all too similar to what we have known before, fueled by an inner urge to return to the former status quo — to return

back to normal — we should be worried as these were the conditions that caused disaster in the first place.

In times of accelerated change and lingering crises, speculation becomes an essential practice to navigate new normals. By situating speculation, we add productive constrain to our imagined futures and acknowledge the many grounds we stand on and the conditions they bear. Through design, we can articulate these futures, enter a discourse, refine them, and ultimately discard or actualise them.



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