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#### Hallo. I am Martin Dittus. @dekstop on Twitter.

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I am a researcher and data scientist at the Oxford Internet Institute, where I study the economic geography of darknet marketplaces.

Before that, I was a researcher in computer science at the ICRI Cities at University College London, where I researched community engagement for the Humanitarian OpenStreetMap Team (HOT), a volunteer initiative with thousands of contributors. At its core this was quantitative work, and my main outputs



were statistics and data visualisations. I made use of the "hard" evidence of contributor data traces, but also the "soft" evidence of knowing the practices and motivations of the community.

I have previously been a software developer and project manager at Last.fm, a director and trustee of the London Hackspace, an organiser for Hack the Barbican and the Electromagnetic Field camping festival, a cat herder for Air Quality Egg contributors, and more. My data visualisations have been featured in Infosthetics [1] [2], Visual Complexity [3][4], FlowingData [5], in print magazine De:Bug [6], Manuel Lima's Visual Complexity book [7], the German-language Visual Simplexity book [8], and elsewhere.

#### Featured work

Research diary: contributor engagement in

State of the Map 2016: Building large-scale





## Information geography: seeking to understand an increasingly digital world

In traditional geography, people and places are defined by their **physical locations** and **properties**.

Yet our lives and the places we live in are increasingly digital, and people and places are increasingly defined by their **virtual attributes** and **digital shadows**.

Graham, Zook, Boulton (2013). Augmented Reality in Urban Places: contested content and the duplicity of code.





#### Google maps

#### "restaurant" loc: 32.075,34.775

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Frishman

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Ester HaMalka

aar Giyora

KKL House

Ophir Hotel

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Karavan Garden

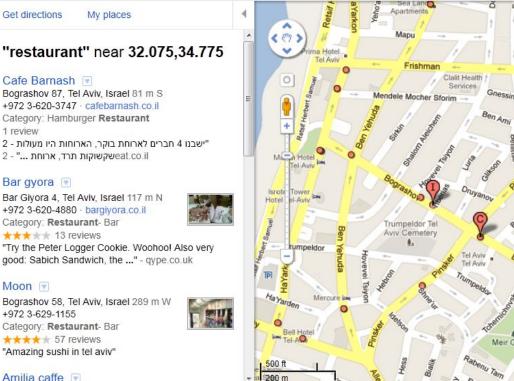
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Merkaz Halr



1 review

#### Bar gyora 🔳

Bar Giyora 4, Tel Aviv, Israel 117 m N +972 3-620-4880 · bargiyora.co.il Category: Restaurant- Bar ★★★★★ 13 reviews

good: Sabich Sandwich, the ... " - gype.co.uk

#### Moon 💌

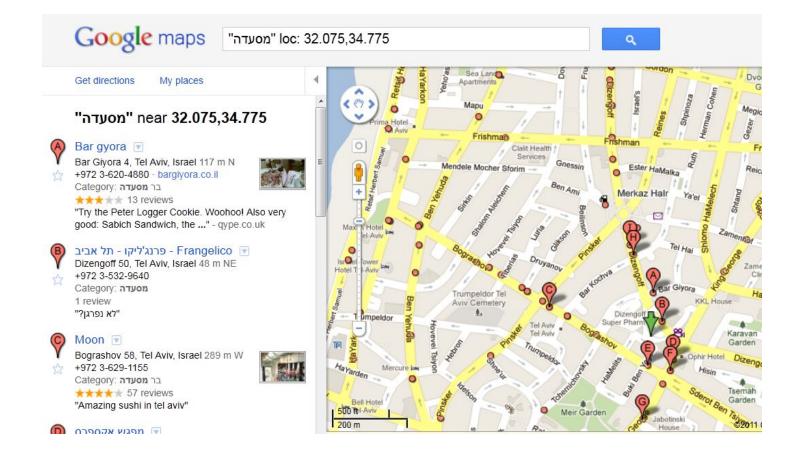
Bograshov 58, Tel Aviv, Israel 289 m W +972 3-629-1155 Category: Restaurant- Bar \*\*\*\* 57 reviews "Amazing sushi in tel aviv"



Slide 4

Meir Garden







#### Google maps "مطعم" loc: 32.075,34.775 Q Get directions My places ( ()) near 32.075,34.775 "مطعم" Frishman Frishman Clalit Health Ophir Hotel 0 Services Gnessir Dizengoff 43, Tel Aviv 0, Israel 98 m E Mendele Mocher Sforim Ester HaMalka +972 3-525-7350 · sexaviv.co.il Ben Am 3 reviews "يضم مطعم Norma Restaurant في فندق Ophir المأكولات المغربية والفرنسية. وهناك أيضا مقهى، ويتم توفير وجبة فطور كاملة booking.com - إسرائيلية بالمطعم نفسه." el-Aviv Hotel Metropolitan Tel-Aviv Isrote-Trumpeldor 11, Tel Aviv 63803, Israel Hotel 734 m W Bar Giyora +972 3-519-2727 · hotelmetropolitan.co.il Trumpeldor Tel Aviv Cemetery 2 reviews Dizenge "يمكنك الاستمتاع بيوفيه الإقطار في مطعم Metro Cafe، والذي يكون Super Phar Tel Aviv مفتوحاً أيضاً في وجبتي الغداء والعسّاء. الوجبات الخفيفة متوفرة طوال اليوم lel Avin booking.com - في البار الموجود ..." P Hayarden Mercure km Prima Hotel Tel Aviv HaYarkon 105, Tel Aviv 63903, Israel 850 m NW Bell Hote A star Tel-Aviv +972 3-520-6666 · english.prima.co.il Meir Garden 1 review ,500 ft "يقدم مطعم Prime Grill اللحوم المتموية الطازجة وأطباق إسرائيلية شهية



KKL House

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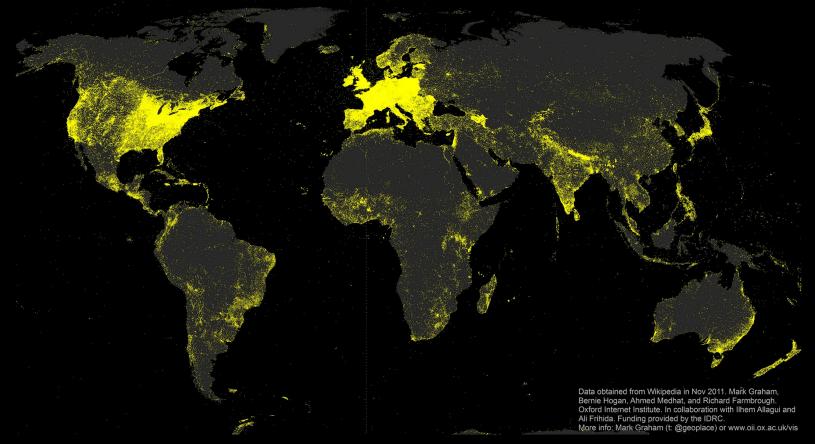
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أخرى. ويقع شارع Dizengoff ، وهو شارع التسوق الرئيسي ، على بعد

# Who owns, controls, shapes, and has access to those augmented and hybrid digital/physical layers of place?

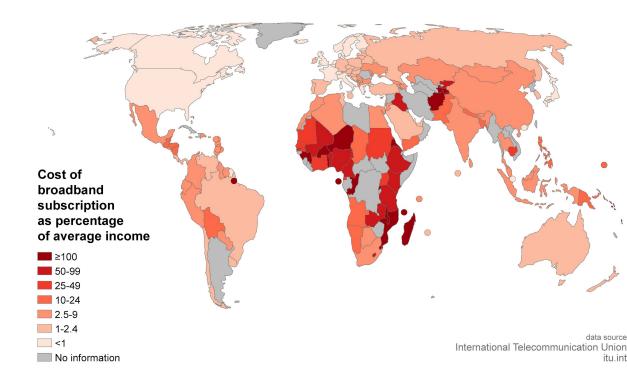


#### Geotagged Articles in English Wikipedia





## Local participation requires connectivity

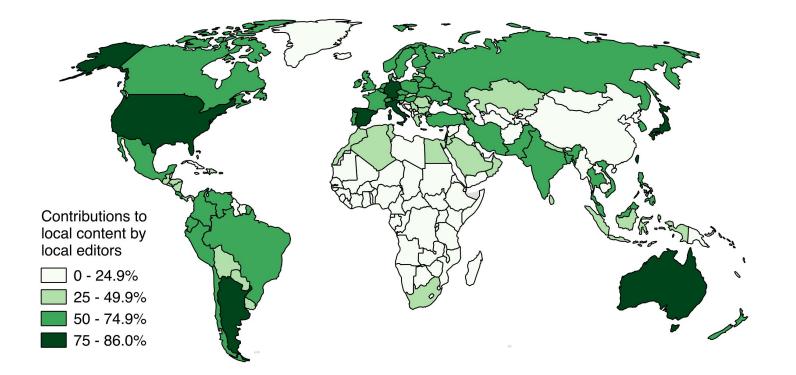


The cost of broadband subscriptions relative to the gross national income per capita, in 2013.

Graham et al. (2015), "Towards a Study of Information Geographies: (im)mutable Augmentations and a Mapping of the Geographies of Information."

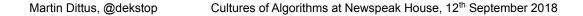


## Building the capacity to tell your own story





## Not just imbalance, but inequity.







## Knowledge equity on Wikipedia

"We will strive to counteract **structural inequalities** to ensure a **just representation** of knowledge and people in the Wikimedia movement." Knowledge equity: Knowledge and communities that have been left out by structures of power and privilege

We will strive to counteract structural inequalities to ensure a just representation of knowledge and people in the Wikimedia movement. We will notably aim to reduce or eliminate the gender gap in our movement. Our decisions about products and programs will be based on a fair distribution of resources. Our structures and governance will rely on the equitable participation of people across our movement. We will extend the Wikimedia presence globally, with a special focus on under-served communities, like indigenous peoples of industrialized nations, and regions of the world, such as Asia, Africa, the Middle East, and Latin America.

#### We will welcome people from every background to build strong and diverse communities.

We will create a culture of hospitality where contributing is enjoyable and rewarding. We will support anyone who wants to contribute in good faith. We will practice respectful collaboration and healthy debate. We will welcome people into our movement from a wide variety of backgrounds, across language, geography, ethnicity, income, education, gender identity, sexual orientation, religion, age, and more. The definition of community will include the many roles we play to advance free and open knowledge, from editors to donors, to organizers, and beyond.

#### We will break down the social, political, and technical barriers preventing people from accessing and contributing to knowledge.

We will work to ensure that free knowledge is available wherever there are people. We will stand against censorship, control, and misinformation. We will defend the privacy of our users and contributors. We will cultivate an environment where anyone can contribute safely, free of harassment and prejudice. We will be a leading advocate and partner for increasing the creation, curation, and dissemination in free and open knowledge.

#### https://meta.wikimedia.org/wiki/Strategy/Wikimedia\_movement/2017/Direction

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#### WIRED

WIRED Opinion

### To reduce inequality, Wikipedia should consider paying editors

The online encyclopedia is a lopsided representation of the world. Should it break its non-profit taboo?

*By* **MARTIN DITTUS** and **MARK GRAHAM** *6:00 AM* 

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In a question and answer session at <u>Wikimania 2018</u>, the annual global gathering of the Wikipedia community in Cape Town in July, an African Wikipedia editor stood up and asked an unusual question.

"You expect us to contribute our knowledge for free?," she said. "People here can't afford to volunteer their time."

What might sound like a provocation was in fact a genuine challenge: Wikipedia should reconsider its current stance against paying editors. The reason? Reducing inequality.

As a free, crowdsourced, online multilingual encyclopedia, Wikipedia has turned previously paid labour into a spare-time activity. Its reliance on self-motivated volunteers works exceedingly well in certain parts of the world; but, in other regions, this model has become an economic barrier to entry. Maybe as a consequence, Wikipedia is surprisingly imbalanced in its coverage of global knowledge.

Almost a decade ago, we began mapping all of the content on Wikipedia and found that the site was a highly



### **Unequal power of articulation & influence**

Technology design often involves an **assumption of universality**: that one approach, designed by one organisation, will be sufficient to address all cases. Vs the concept of the **pluriversal** in decolonial theory: to allow for multiple entangled articulations to coexist, to emphasise those situated at the margins (Mignoli 2011).

Design is further shaped by forms of **cultural hegemony**: contribution processes are informed by a specific cultural (Western) context, others need to adapt (Irani et al. 2010).

### Complex technology: inequitable by design

Sociotechnical systems are often **intransparent** in their workings, and **designed by an expert elite**. This in inherently inequitable.

To counteract this, we should ask that **human oversight** always remains a central part of such systems. We should demand that **outcomes are legible to and interpretable by people affected** by algorithmic processes.

One might call this an "unblackboxing" of these systems.



## Seven conceptions of *social justice*

David M. Smith (1994), "Geography and Social Justice":

- **Egalitarianism**: equal distribution of wealth and power
- Utilitarianism: the greater good for the greatest number
- Libertarianism: value of the individual over the state
- Contractarianism: explicit agreements based on subjective preferences
- **Marxism**: rewarding the full value of an individual's contribution
- Communitarianism: shared practices and values over individual or state interest
- **Feminism**: addressing power imbalances between groups



## Digital rights to the city

## **Data justice**, as analogous to **spatial justice**:

## Data impacts how we **perceive**, **move through**, and **use** space.

Joe Shaw and Mark Graham (eds.): Our Digital Rights to the City. Meatspace Press 2017 <u>https://meatspacepress.org/our-digital-rights-to-the-city/</u>



## "AI", "blockchain", novel tech as **Catalysts for thought** rather than effective solutions

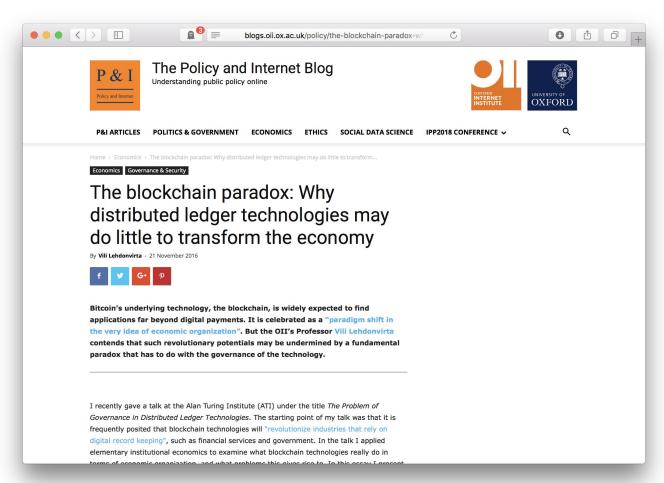
Martin Dittus, @dekstop Cultures of Algorithms at Newspeak House, 12<sup>th</sup> September 2018



## The blockchain is a lie

Martin Dittus, @dekstop Cultures of Algorithms at Newspeak House, 12<sup>th</sup> September 2018







blogs.oii.ox.ac.uk/policy/the-blockchain-paradox-wi

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colleagues George Danezis and Sarah Meiklejohn, which is intended to be governed by a central bank.

mings of something like Swith, Another example is Rocom, designed by my Att

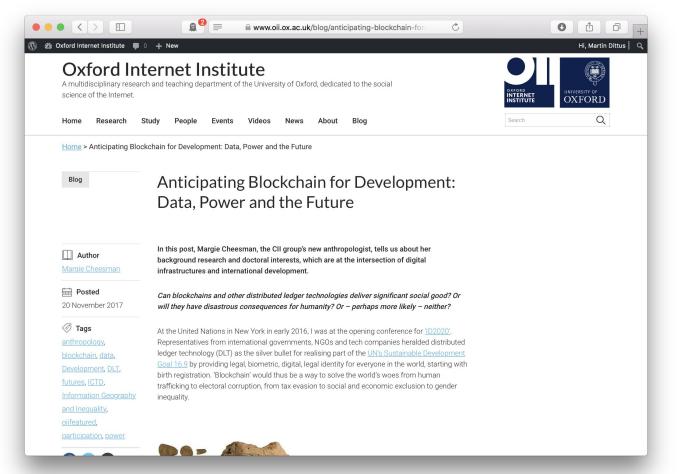
**Regardless of the model, my point is that blockchain technologies cannot escape the problem of governance.** Whether they recognize it or not, they face the same governance issues as conventional third-party enforcers. You can use technologies to potentially enhance the processes of governance (eg. transparency, online deliberation, evoting), but you can't engineer away governance as such. All this leads me to wonder how revolutionary blockchain technologies really are. If you still rely on a Board of Directors or similar body to make it work, how much has economic organization really changed?

And this leads me to my final point, a provocation: **once you address the problem of governance, you no longer need blockchain;** you can just as well use conventional technology that assumes a trusted central party to enforce the rules, because you're already trusting somebody (or some organization/process) to make the rules. I call this blockchain's 'governance paradox': once you master it, you no longer need it. Indeed, R3's design seems to have something called "uniqueness services", which look a lot like trusted third-party enforcers (though this isn't clear from the white paper). RSCoin likewise relies entirely on trusted third parties. The differences to conventional technology are no longer that apparent.

Perhaps blockchain technologies can still deliver better technical performance, like better

Cultures of Algorithms at Newspeak House, 12th September 2018







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#### Claude Lévi-Strauss

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As the above findings suggest, blockchain is pinned with myriad assumptions as its potential role in endless domains is exaggerated. Taking seriously this enchanting agency, this pull blockchain seems to possess, I wish to pass beyond the sterile debates of techno-optimism versus skepticism by understanding DLTs through Lévi-Strauss' famous analytic in Tristes Tropiques: bon à penser. In this text, Lévi-Strauss suggests totemic animals are chosen not because they are 'good to eat' but rather because they are 'bon à penser [good to think with]'. Blockchain, one such mythical beast, must not be dismissed as empty hype, nor must we give in to its totalizing allure. Rather, blockchain is an important thinking tool for addressing contemporary challenges, for imagining better societies and better development. For me, the important guestion is: to what extent is/can blockchain be more than just bon à penser? Blockchain dreams are a thought exercise in building accountable, robust trust networks, flattening out power relations, and giving more agency to the recipients of aid. I am interested in examining: what exactly can blockchain do to mitigate inequality, how, when, and what is at stake? My preliminary research suggests that the possibilities are ultimately limited by the power of market logics, commercial strategies and state interests, and by multifarious unknowns around regulation and law.

#### 3. Futurity

Martin Dittus, @dekstop



## People's surprising fascination with AI and blockchains reveals their curiosities/hopes/fears about systems change



## Thank you!



#### Martin Dittus, @dekstop

### Digital Geography Oxford Internet Institute

Martin Dittus, @dekstop Cultures of Algorithms at Newspeak House, 12<sup>th</sup> September 2018

