To subvert is to, literally, "under-turn." "Subversive cartography" typically implies the use of maps to disturb, overthrow, or undermine an oppressive or restrictive social, political, or economic order. We expect much from maps in this human, social realm yet they can struggle in this role. Maps are alluring and evocative, yet they are distant, anti-social, detached, even alien. So close, yet so far. Are maps autistic? Autism is a spectrum of neurological conditions, distinguished by varying degrees of impaired social interaction, rigidity, repetitiveness, and emotional detachment with, paradoxically, the potential for unusual creativity, talents, and high intelligence. Debates rage over the origins, nature, cognitive foundation, and social construction of autism (as they do with maps). There are curious parallels (and differences) between autism and maps which, when explored, may help gauge the characteristics and potential of maps as subversive objects. Maps may interpellate disparate human subjects: what kinds of "map people" do maps make us? Do such tendencies operate in the map creation process, or the map reading process, or both? Might maps "autistic" tendencies, if they exist, subvert subversive intent or enhance it?

**SL) Quote**

I remember the voice of the psychologist coaxing me to start playing. And because I flapped my hands, because I did not respond to toy blocks, because I did not talk, and because I could not imitate her, the diagnosis: autism.

Autism! A fancy word. Well, now that I knew I was autistic, I began to group things under it. I made up a whole list of things that I thought had autism. The curtains that moved in the wind, the big and small leaves that moved a little more with the air because of their suspended positions, the little bits of paper, or the pages of an open book under a fan were labeled as autistic. They were affected with autism because they flapped, because they would not respond to any blocks, because they did not talk, and I was sure they would not be able to imitate the psychologist.


**Hand Outs)** comic + paper + quotes

- quotes from this author

To subvert (*sub vertre*) is literally to *over throw*.

What does that concept mean for mapping, for cartography?

**SL) Title**

- to answer this question I have to address a few other issues …
Subversion A

SL) “This is Not” comic

Propositions for Mapmakers, volume 1

“This is Not the World”

Maps ≠ representations (or images, or pictures) but = propositions / arguments

• Subverts academic / popular conceptualization of maps

• Denis Wood: The Natures of Maps, The Power of Maps (2\textsuperscript{nd} ed)

SL) Form - the comic - subverts academic discourse:

Traditional literacy is exactly what comic art challenges – and with it whole notions of hierarchical understandings of society and art. Comics … are just one of many keys to breaking down conventional society’s standards of meaning. Maggio, 2007, p. 238

• rapid expansion of scholarly research on comics: important for mapping

SL) red

Ideas for more comics, more propositions for cartographers, via subversion

SL) Tito quote

Nights were terrible. He searched everywhere for his shadow. He flapped to call it, there was nothing but darkness. He cried for it, betrayed by the friend.

Tito Rajarshi Mukhopadhyay
**Subversion B**

**SL)** “Hey, Map People” comic: *Propositions for Mapmakers, volume 2*

**SL)** Kitchin & Dodge quote (“Rethinking Maps” in *Progress in Human Geography*)

Maps are remade in diverse ways by people within particular contexts and cultures…maps are constantly in a state of becoming; constantly being remade.

**Onto-genetic**

People constantly bring maps into being.

…so I switched this around – **subverted**?

**SL)** quote

People are remade in diverse ways by maps within particular contexts and cultures…people are constantly in a state of becoming; constantly being remade.

**Onto-genetic**

Maps constantly bring people into being. *Map People*

**SL)** Lawn People Map People

The idea of map people jelled while listening to Paul talk about the ways lawns make people – lawn people.

Do lawns – and maps - have **agency**? Capacity to act in the world. **Sure.**

**SL)** gps/map mayhem

It’s what **map people do**

**SL)** What if we rethink maps as having agency? And how do they make map people?


…I’m working on it.

**SL)** blue
SL) Tito quote

All the world was a busy place
And I was an idle kind
Disqualified in the human race
A different form of mind

Tito Rajarshi Mukhopadhyay

Subversion C

SL) “Yes, I Mind” comic: Propositions for Mapmakers, volume 3

Do maps have minds?

SL) some have said that maps have mysterious emergent qualities

Vernacular NeoSpinozian Emergentism

A map is more than the sum of its parts, it contains greater knowledge than is contained in the factual information used for its elaboration. Fairbairn (1984)

SL) …and others that they are almost magic (Sovereign Map)

Manipulations of the map come close to magic, playing with the analogical properties of the image in order to act on reality. Jacob (2006)

I don’t believe in magic, don’t believe in emergentism...

So it seems reasonable to overturn any ontology that fails

to explain the map’s agency & “emergent” and “magical” properties

or can only say it is inexplicable or unknowable.
Dualism to Monism

Dualism: a world of binaries: mind/matter

- w/mind emerging in humans, mysteriously, magically, at some point
- emergentism underlies most Western philosophy
- if one is not into such mystery and magic, by default…
- Overturn: Monism: mind and matter are not ontologically distinct

analytical argument …

- Physical reality consists solely of rearrangeable particles of matter
- Mental states are neither reducible to, nor entailed by, physical states
- Mental states are real
- There are no truly emergent properties

- which opens up a whole slew of curious possibilities

- including attributing mind to all matter

Panpsychism:

All objects, or systems of objects, possess a singular inner experience of the world around them. (Skrbina)

A meta-theory of mind:

However you conceive of mind, and there are many theories of mind, it applies to all things. (Skrbina)

- Lands us in the realm of the Posthuman and Postanthrocentric

what if maps – as matter – have minds?

Retheorizing mind: Skrbina Panpsychism in the West (2005), Mathews For Love of Matter (2003), Posthumanism literature

…I’m working on it.

Yellow
SL) Tito Quote

Long long ago
When nothing was there
And God got bored with himself
He made everything
Then he got bored
With everything that was perfect
And so planned to make some distortions
So he made some like me
Who as they say have lost their minds

Tito Rajarshi Mukhopadhyay

Subversion D

SL) “Are Maps Autistic?” comic: Propositions for Mapmakers, volume 4

SL) Comrade graphic

Maps, our comrades: we/they constantly becoming, in tandem,

• symbi-onto-genetic

SL) Google: symbi-onto-genetic “did not match any documents”

What are they like? Autistic maybe?

SL) Autism is hot right now

Popular Culture: autism = disability, tragedy, illness, retardation, subhuman, distant, detached, alone

“Post-autistic economics” “autistic rock”

But also

Autism as subversive: subverts the human, subverts mind

SL) Look Me in the Eye

Avalanche of memoirs written by people on the autistic spectrum
**SL) Autistic rights** movement: “Were here, were weird, get used to it.”

**SL) neurodiversity** movement ~ **neuropolitics** ~ **biopolitics**

**SL) genetics:** inherited & mutations

… much of it based on emerging research showing autism is genetic

**SL) recent explosion in scholarly literature** on autism theory

• social sciences and humanities

**SL) is autism at the foundation of Western Civilization?**

What we see in autism is an extreme form of a tendency that exists in all people, and this tendency is stronger in males.

Given the influence that males have had in shaping Western society, how has this tendency manifested in the social structures, norms and values that structure our society? (John Lawson)

• and tho that one might add stuff like maps.

**SL) Panautism**

Call this broad interdisciplinary array of ideas **panautism**

• its paradoxical, uncanny, upsetting, anarchic, subversive

• and panpsychist, posthuman, and post-anthrocentric (transcends the “human”)

• …and also the basis of Western civilization

**SL) black**

**SL) Diagnostic Criteria**

• a preliminary diagnosis of comrade map

• Diagnostic and Statistical Manual of Mental Disorders

**SL) magenta**
**SL** Tito Quote

I can go to places that do not exist  
And they are like beautiful dreams  
But it is a world full of improbabilities  
Racing towards uncertainty

Tito Rajarshi Mukhopadhyay

**SL** Imagination - limits and capacities

*Peculiar creativity*, putting things together in unique ways, seeing things differently, often such that the outcomes are unexpected or puzzling

**SL** the fascination with maps driving understanding – whether the stories are true or not (Snow Cholera Map)

**SL** shocking the global imagination (Edes Harrison’s *Look at the World*)

**SL** constructing imagined worlds (Tolkien)

  • but most mapping has rather severe limits on creativity

**SL** or does it? (all the recent map art [Schnabel])

**SL** brown

**SL** Tito quote

There is no fun in answering if freedom is restricted to the rules of a disciplined sentence.

Tito Rajarshi Mukhopadhyay

**SL** Communication - limits and capacities

*Peculiar communication*: limits in social interactions but hyper-expressive in alternative forms (art, math, music), or with animals or on specialized topics

**SL** the information graphic fetish, exemplified by Edward Tufte

**SL** a space for graphic experimentation (1911 cartogram)

**SL** with all sorts of curious limitations (gender differences)

**SL** orange
SL) Tito quote

The world was a suitable place for the social beings and not beings like us.

Tito Rajarshi Mukhopadhyay

SL) Neither social nor anti-social

Struggles with social interactions, objects as (or more) interesting as people, but not anti-social: just not social (neither)

SL) no matter how hard maps try to be social (abolition map)

SL) and they do try (Bunge)

SL) they are just not quite social … nor anti-social (dead in Iraq)

SL) purple

SL) Tito Quote

I sat a whole day in a classroom, planting mental nails all over the walls. I knew that those nails never existed, but when I planted them I experienced their hardness and their blackened shine. They kept my mind busy the whole day… How could I have time to think of any other thing?

Tito Rajarshi Mukhopadhyay

SL) … calms a chaotic sensory system.

SL) Repetitive, ritualistic

Comfort and calming in repetition and rituals.

SL) maps are repetitive

SL) repetitive

SL) repetitive

SL) and ritualistic

SL) …they calm a chaotic world

SL) green
I wait for the green colour of hope. During the afternoon I had thought so much about green hope, that I coloured a few pages green. I had locked the door, so that Anna could not enter and hide the green crayons. I was not going to open the door and let the greenish hope leave me. I saw greenish red drops of blood gushing out of my wrist. Yes, it pained. But since it was green pain, I did not mind much.

Tito Rajarshi Mukhopadhyay

**Sensory “Contradictions”**

Challenging:

What’s quiet is loud, soft is hard, big is small, invisible is visible

…and **Synesthesia:** tasting shapes, seeing sound, feeling the visible

**SL** seeing what we feel (temperature) … inverting the invisible (boundaries)

**SL** seeing what we hear (sound map)

**SL** … maps amplify, invert, and deaden the senses; maps are **synesthetic**.

**purple**

**Tito quote**

Was he not a riddle for all those men and their profession? Was he not a wise dumb?

Tito Rajarshi Mukhopadhyay

Finally, reappropriate a problematic term…
SL) Idiot Savant

Greek *idiotes* “private person” + Latin *sapere* “to be wise”

The problematic “rain man” stereotype of autism: brilliant at math or music but cannot talk or tie shoes

SL) world

SL) zoom

SL) zoom: US 1:24000 topographic map grid

SL) quote: there is work to do in applying theories of idiocy to maps

The quest for wholeness is undermined by a form of idiocy on which every type of organization founders. Ultimately it is the map itself that stands in the way of our successful mapping of the world.

Idiocy poses a threat to order; the attempt to come to direct grips with idiocy would lead to bewilderment. Yet none of our constructions would work in the complete absence of idiocy; idiocy makes one think.

We must keep idiocy at bay even while embracing it.


SL) zoom: Salt Lake

SL) zoom: Topo: you can’t have a hole in the comprehensive system

• but it might seem *idiotic* to have an all water topographic map

• …makes one think

SL) zoom

SL) zoom

SL) white
SL] Yeah: its all a big mess of preliminary ideas, somewhat inadequately considered

• am I subverting myself?

SL] Rethinking maps through the lens of subversion: what if…

Maps are *propositions*
Not text as academic discourse
Maps have *agency*
Maps have *mind*
Maps and us: *symbiontogenetic*
Maps (and us) as *(pan)autistic* (in different ways)

...the *subversive* potential of *maps* ...

and *us map people*...