Old rope: Laing’s knots and Bateson’s double binds in systemic design

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Old Rope: Laing’s Knots and Bateson’s Double Binds in Systemic Design
Carnegie Mellon School of Design, Pittsburgh, Pennsylvania
Design with Intent toolkit

A cross-disciplinary design pattern library for behaviour change with products, services and environments; developed through workshops with industry and academia
Design com Intento

101 padrões para influenciar comportamentos através do design

Dan Lockton
com David Harrison & Neville A. Stanton

Tradução: Luis Oliveira

Requisite Variety
We're a research studio using design methods to explore and support people's imagining—both new ways to understand, and new ways to live.
Who we are

Current Imaginaries Lab research team

Devika Singh, Research Assistant 2017–
Gray Crawford, Research Assistant 2018–; MDes thesis student
Aadya Krishnaprasad, Research Assistant 2018–
Rachel Gray Alexander, Research Assistant 2018–
Michelle Chou, Research Assistant 2018–
Saloni Sabnis, Research Assistant 2018–
Dan Lockton, Assistant Professor
Bella, Friend of the Lab
using design methods to understand how people understand
using design methods to help people understand in new ways
using design methods to help people imagine new ways of living
using design methods to enable people to change the behaviour of the systems they’re in
How can we create new metaphors to help people reframe or understand complex ideas?
New Metaphors at the Ellen MacArthur Foundation Disruptive Innovation Festival (online), 9 Nov

Devika Singh, Saloni Sabnis, Michelle Chou, Dan Lockton
How do people understand local government? (Systems mapping through story construction)
If you could see (and hear) electricity in different ways, would you understand it differently?

(New types of ‘qualitative’ interface design)

Shengzhi Wu, Gray Crawford, Devika Singh, Dan Lockton (2018). ‘Electric Acoustic’
Can you use model landscapes to explore how you think about your own life? (‘Personal’ systems mapping using metaphors)

How can we use design methods to enable people to materialise and share their own experiences of mental health?

Laura Rodriguez, Josh LeFevre, Nowell Kahle, Arden Wolf, Katie Herzog, Aisha Dev, Kailin Dong, Katie Glass, Nicole Jin, Soonho Kwon, Jessica Nip
‘If [people] define situations as real, they are real in their consequences’

William Thomas & Dorothy Swaine Thomas
The Child In America, 1928
mental models
heuristics
folk theories
assumed cause & effect links
metaphors
stories
people often act on imaginaries
people often act on their models of the systems they’re in
artificial intelligence
automation
algorithmic decision-making
personal data and privacy
social media
‘the Internet’
public health
climate change
ergy
resources
social equity
the law
the government
the economy
quality of life
using design methods to understand how people understand
using design methods to help people understand in new ways
They are playing a game. They are playing at not playing a game. If I show them I see they are, I shall break the rules and they will punish me. I must play their game, of not seeing I see the game.
I get what I deserve
I deserve what I get.

I have it,
    therefore I deserve it

I deserve it
    because I have it.

You have not got it
    therefore you do not deserve it

You do not deserve it
    because you have not got it

You have not got it
    because you do not deserve it

You do not deserve it
    therefore you have not got it.
You are frightened of being boring, you try to be interesting by not being interested, but are interested only in not being boring.

You are not interested in me.
You are only interested that I be interested in you.

You pretend to be bored because I am not interested that you are frightened that I am not frightened
Many of Laing’s knots are essentially about people trying to understand what someone else understands about them.

Or about how someone understands their relationship with a system.

But that understanding changes how they relate to the system, and the system in turn changes the relationship.
Double binds

(Gregory Bateson)

Contradictory injunctions on a person, often acting at different ‘levels’ of a system

No right answer; fulfilling one demand means you fail to fulfil the other

Can’t opt out, can’t resolve it
I am not entitled to what I have

therefore

everything I have is stolen

because

I've stolen it

because

I'm not entitled to it
How are knots relevant to design?

One application is in doing user research around people’s understandings of artificial intelligence, algorithmic profiling, and ‘smart’ technologies (whatever that means to people)

Thinking about things that think about how we think
What does it look like when we start having these kinds of thoughts about other actors—not just humans?

And when they start having these kinds of ‘thoughts’ about us?

(What ‘models of people’ are being designed into algorithms?)
More generally, though:

Knots offer a way of enabling recursion, reflexivity, theory of mind, and second-order effects in systems to be explored through a variety of narrative formats
More generally, though:

Knots offer a way of enabling recursion, reflexivity, theory of mind, and second-order effects in systems to be explored through a variety of narrative formats.
Opening a snapchat from someone you're interested in romantically

Waiting to open the snapchat to seem like you don't care

Opening their snapchat and not responding for days to seem like you don't care

Opening their snapchat and typing in the text block so that they get a notification saying that you're typing but then erasing your text and not responding for days so that they think you were going to respond but changed your mind and decided not to and they overanalyze it
JILL'S EXPERIENCE

Jack is important to me
→ I should reply quickly

The reply is fast
→ I should think carefully about my reply

I shouldn't think too much about my reply
→ Jack is not important to me

I shouldn't prioritise replying

JACK'S EXPERIENCE

My experience is a fast reply
→ Jill thinks I am important

Jill thinks I am important

The reply is slow
→ My experience is no reply (initially at least)

The reply is fast
→ I should reply quickly

Jack is important to me
‘Your experience of me is invisible to me and my experience of you is invisible to you...

[but] I cannot avoid trying to understand your experience, because although I do not experience your experience...

I experience you as experiencing”

RD Laing, The Politics of Experience, 1967
Jill likes Jack
Jill hopes Jack likes Jill
Jill hopes Jack thinks Jill likes Jack
Jill worries Jack thinks Jill doesn’t like Jack
Jill worries Jack thinks Jill likes Jack too much

Jack doesn’t like Jill
Jack hopes Jill doesn’t like Jack

Jack hopes that Jill likes Jack
    even though he doesn’t like her

Jack doesn’t like Jack
Jill likes Jack
Jill *hopes* Jack likes Jill
Jill hopes Jack thinks Jill likes Jack
Jill *worries* Jack thinks Jill doesn’t like Jack
Jill worries Jack thinks Jill likes Jack too much

Jack doesn’t like Jill
Jack hopes Jill doesn’t like Jack

Jack hopes that Jill likes Jack
even though he doesn’t like her

Jack doesn’t like Jack
KNOTS IN BEHAVIOUR CHANGE

My attitude must be wrong

because my behaviour is wrong

because my attitude is wrong

I will change my behaviour

when everyone else does

otherwise there’s no point

How can I change?

I want to change

does that mean my attitude is right?

then I don’t need to change

but I want to
KNOTS IN THE SMART HOME

YOU  I don't want you to know more about me

YOUR HOME  Why?

YOU  I shouldn't have to tell you

YOUR HOME  If you don't tell me, I can't give you what you want

YOU  How do you know what I want?

YOUR HOME  I don't, unless you tell me more about you
KNOTS AND CLICKBAIT

We want them to click

It’s shocking
so I click on it

It’s shocking
so I click on it

It’s shocking
They click on it

so show them shocking things

It’s not shocking
any more
Teaching this to design students is a way of adding to their conceptual vocabulary, but what about research with people?

How can we use knots (and double binds) as a concept to help people explore their relationships with systems?

Can we untangle them? Should we? (Is it inherently ‘wicked’?)

What could it look like to turn knots into a form of probe or interview tool?

Could we actually physicalise it with string?
Data Physicalisation

New Ways To Think, Fall 2018
KNOTS AND THE SMART FRIDGE, OR THE OLD SAUSAGE

I am vegetarian
I don’t like sausage
My friend is not
She came to stay
She brought sausage
She left some

My fridge has sausage in it
I don’t eat it

Your fridge has sausage in it

My fridge has sausage in it
I don’t eat it

Your fridge has sausage in it

My fridge has sausage in it
I don’t like sausage

Your fridge always has sausage in it
You must really like sausage

Let me order you some more

Based on a case in Delfina Fantini van Ditmar’s PhD, IdIoT: Second-order cybernetics in the ‘smart’ home, 2016
Thank you!

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