The words are knots and data is not *not* a design material

Using poetry inspired by R.D. Laing to address explore the nature of data as a design material.

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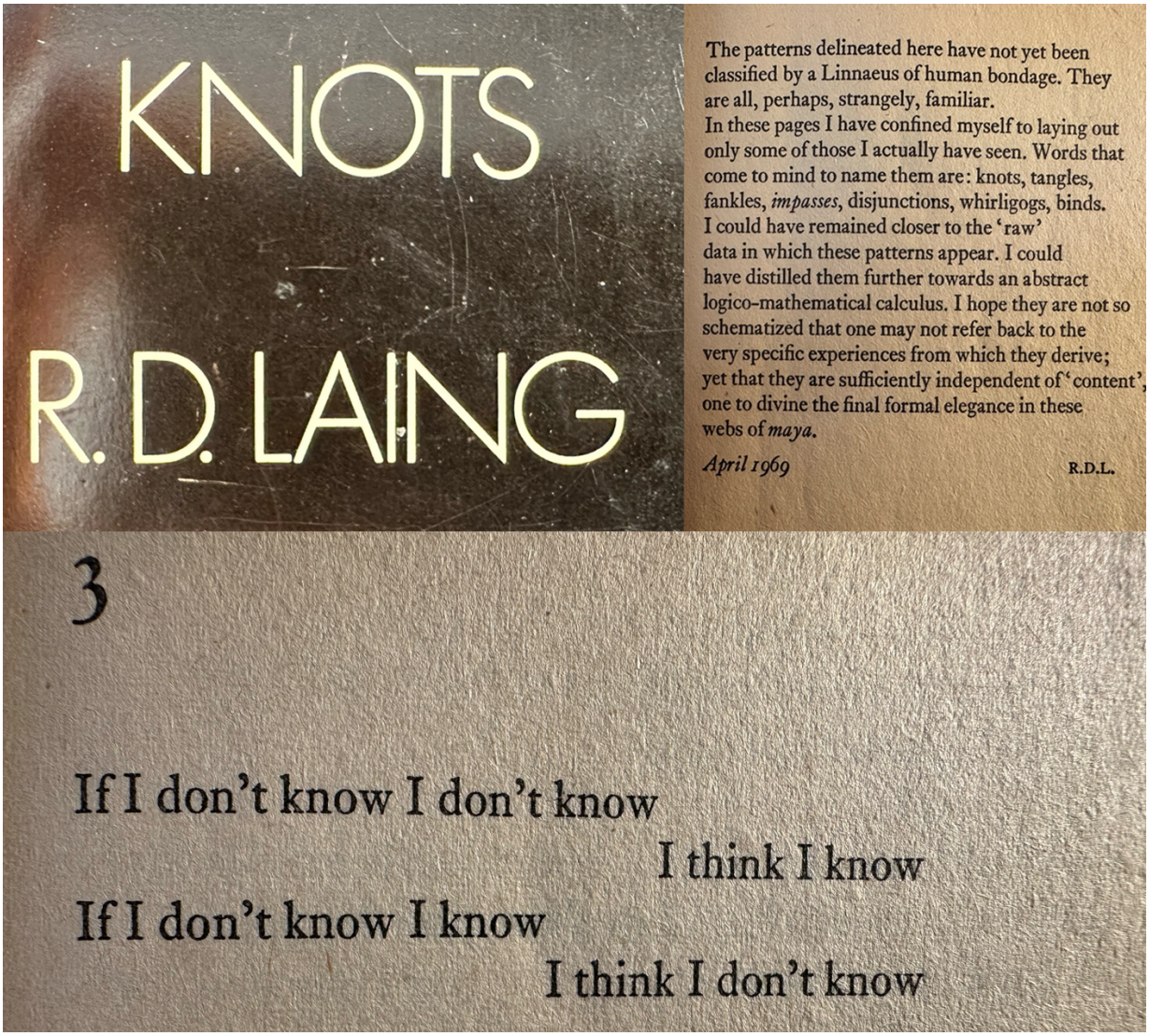
This work is inspired by R.D. Laing's poetry book *Knots* [2]. Laing—who was a psychiatrist—uses the layout of words on the page, their rhythm, and curious linguistic juxtapositions to describe and explore different kinds of conceptually 'knotted' relationships. On the page, these knots are represented as poems. The poems address human issues through by exploring dependency, predictability, attraction, envy, and introspection. Here we explore the knots of conceptualising data, design, and the sense of data as a material of design. We note the work of Dan Lockton who demonstrate the use of Laing-inspired knots to illustrate examples around data, social media, clickbait, and 'smart' homes [3]. We would also like to draw attention to our own exploration of the phraseology *as a design material* in a paper exploring AI-infused digital portraiture. In that work we forward two observations about what it means to refer to something as a design material. First, design materials are often characterized by their interactions with other material. Second, the properties of design materials may be described as a combination of what they *are* but also what they *do* [1]. Most of the rest of the paper is made up of a series of poems written by the authors, inspired the poems that appear in Knots. We propose these verses as discussion points for the workshop *Data as a Material for Design: Alternative Narratives, Divergent Pathways, and Future Directions* and we invite further poetic contributions on the topic to provide alternative, complementary, or radical perspectives on these matters and knots.

Keywords: Data as a design material; R.D. Laing; Knots.



Photographic reproductions from a 1970 edition of Knots [2].

(i would say)
material can be designed

(this makes me think that)
design can be done to material

(the inverse could sometimes also be true)
material can not be designed

(sometimes)
design can not be material

material synonyms:

matter
substance
constituent
stuff
medium
element
gubbins
fabric
information
fact
information
data

to design requires learning +
learning design requires practise +
practising design requires practice +
practice requires material

$\therefore$

learning design requires material

the data feeds the algorithm.
thereby changing it.

the new algorithm creates new data.
the new data feeds the new algorithm.
thereby changing it.

the new new algorithm creates new new data.
the new new data feeds the new new algorithm.
thereby changing it.

the new new new algorithm creates new new new data.
the new new new data feeds the new new new algorithm.
thereby changing it.

the new new new new algorithm creates new new new new data.

‘a bit’ is binary
‘some bits’ is a plural
‘many plurals’ are data
‘many data’ are potential
‘potential’ is a property of capacity
‘capacity’ is volume, space, extent, and scope
‘volume, space, extent and scope’ are size
‘size’ is tangible and solid and real
‘real’ is verifiable and evident
‘evident’ is binary
‘binary’ is a bit

my data are over there
your data are in my pocket
i ate your data for breakfast
your data are now part of me

you can't touch me
but I am here
i can't touch you
but you are there

01001001 01100110 00100000
01110100 01101000 01101001 01110011 00100000
01101001 01110011 00100000
01110000 01101111 01100101 01110100 01110010 01111001
00101100 00100000
01001001 00100000
01100001 01101101 00100000
01100001 00100000
01110000 01101111 01100101 01110100 00101110 00001010
01001001 01100110 00100000
01110100 01101000 01101001 01110011 00100000
01101001 01110011 00100000
01100100 01100001 01110100 01100001 00101100
00100000
01001001 00100000
01100001 01101101 00100000
01100001 00100000
01100011 01101111 01101101 01110000 01110101 01110100
01100101 01110010 00101110

data !=
poetry.
data is data.
data about data, though.
is not poetry about poetry.
data about data == metadata.
poems about poetry == metapoetry.
data about poetry.
poems about data.
data about poems about poetry ==
poems about metadata?
or data about metapoems?
data about poems about data.
is it poetry?
or data?

I design with wood
wood is my design material
I know how to design with wood because I have practised
and practised
and practised
I know the materiality of the wood
but each tree is unique

I design with clay
clay is my design material
I know how to design with clay because I have built many pots
and cups
and saucers
I know the materiality of the clay
I have smashed many vases

I design with people
people are my design material
I know how to design with people because they tell me when I get it wrong
and right
and sometimes they lie
I know the materiality of people
is fleshy and emotional

I design silicone chips
they are my design material
I know how to design with silicone chips because of determinism
and I am part of a team
and classical physics
I know the materiality of silicone chips
they count very quickly

I design with data
data are my design material
I know how to design with data because I get to know each of them
I understand them
I play with them
I know the materiality of data because
each datum is unique

.....

the material of design practise is practicing the practise of making meaning

they design with code
they know how to code
they are experienced with code

we design with glass
we like to experiment with glass
when we finish, they buy our glass

I design with flows of information
I like to imagine the consequences of things
knowing stuff about other things
I know I designed the flow of information right
because I get what I want

she designs with lead
he pulls the trigger
the bullet is hard

our data is designed
our data is experimental
our data is hard
our data gives us what we think we want

—

dear metal, your materiality is immaterial:
I know your shininess, a distinctive taste, and *what you **do***

dear data, your materiality is immaterial:
I know your bigness, your intangibility, and *what you **do***

dear materiality, your materiality is immaterial:
if I can know *what you **do***

References

[1] Green, D. P., Lindley, J., Mason, Z., & Coulton, P. (2021). A Design-Led Exploration of Material Interactions between Machine Learning and Digital Portraiture. *Proceedings of the International Association of Societies of Design Research*. https://designresearch.works/assets/papers/iasdr2021-faces-green-lindley-mason-coulton.pdf

[2] R.D. Laing. 1970. Knots. Penguin Books.

[3] Dan Lockton. 2018. Exploring R.D. Laing's Knots in Systemic Design. In Relating Systems Thinking and Design Symposium.

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