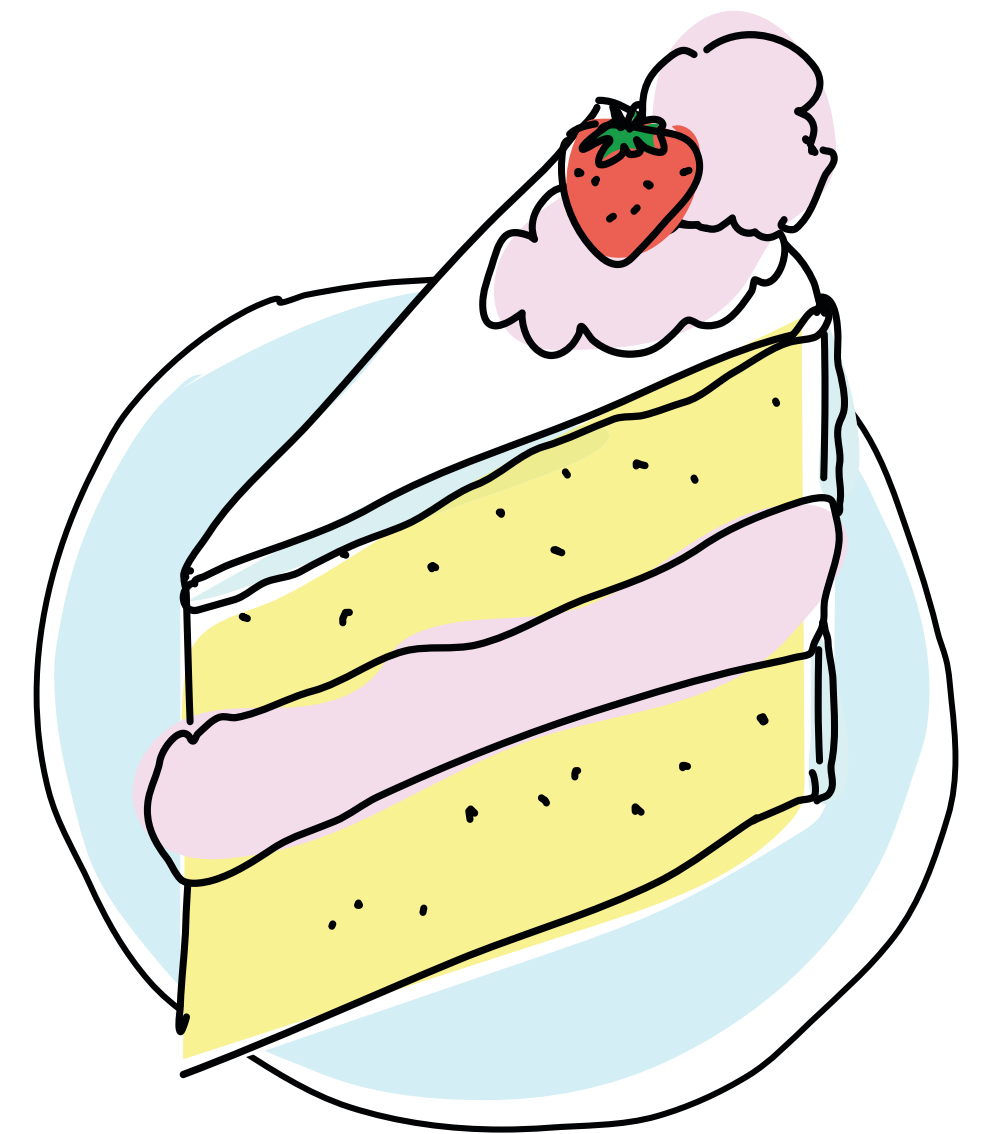


Te Pūnaha Matatini
Data ■ Knowledge ■ Insight

Making cakes: transdisciplinary terms and teams

Kate Hannah
+ Jo Bailey

@punahamatatini
@knhannah
@jo_bailey



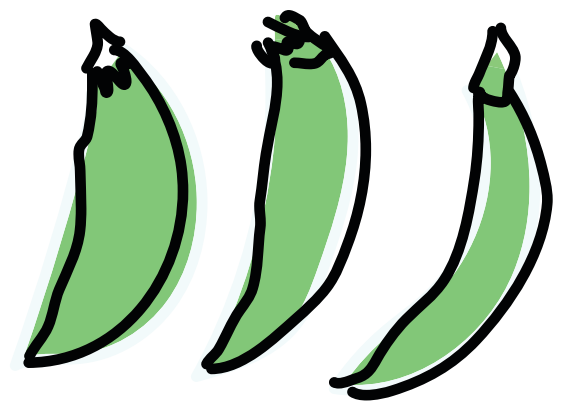
aka... Fusion cooking with
disciplines!



visuals at:

makinggood.design/ICMIT

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- an 'interdisciplinary'
Kitchen?
- a 'new room'
 - open to all disciplines
 - because the landscape epic
 - and it takes multiple viewpoints to understand its complexity

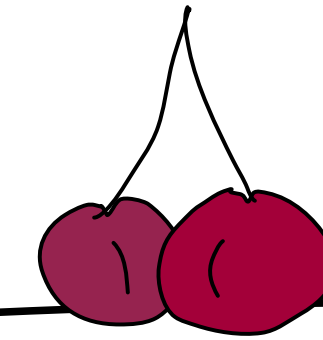


Thoughts from Margaret Mead's *Blackberry Winter*, in Stember, M. (1991). Advancing the social sciences through the interdisciplinary enterprise. *The Social Science Journal*, 28(1), 1-14.

“The practical argument for interdisciplinarity is that problems of the world are not organised according to academic disciplines..”

Stember, M. (1991). Advancing the social sciences through the interdisciplinary enterprise. *The Social Science Journal*, 28(1), 1-14.





TRANSDISCIPLINARY

INTERDISCIPLINARY

MULTIDISCIPLINARY

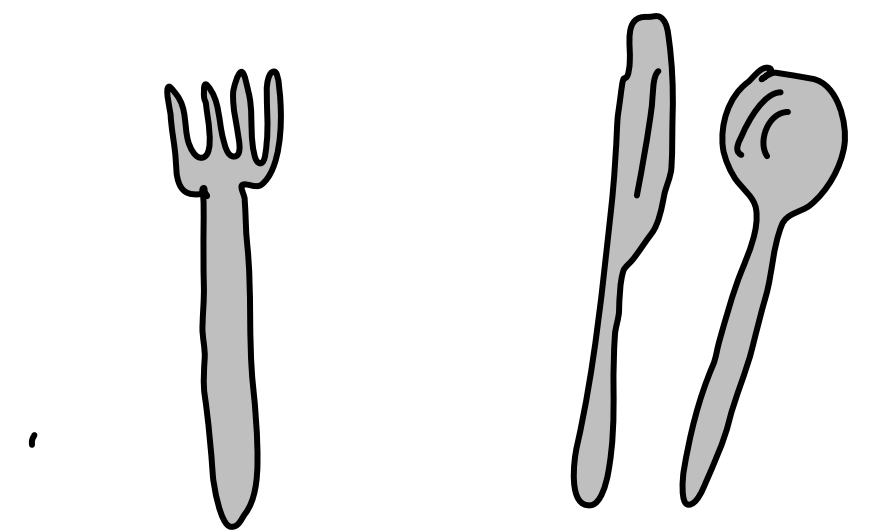
CROSSDISCIPLINARY

INTRADISCIPLINARY

Stember, M. (1991). Advancing the social sciences through the interdisciplinary enterprise. *The Social Science Journal*, 28(1), 1-14.

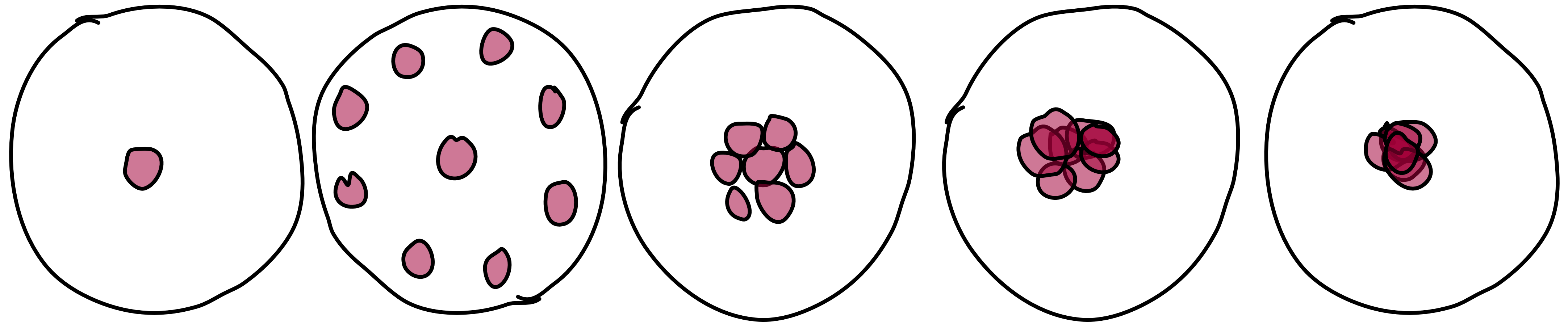
“projects that integrate both academic researchers from different unrelated disciplines and user-group participants to reach a common goal”

Tress, B., Tress, G., Valk, A. J. J. van der, & Fry, G. (2003). *Interdisciplinary and Transdisciplinary Landscape Studies: Potential and Limitations*. WUR, Alterra.



	Multidisciplinary	Interdisciplinary	Transdisciplinary
Keyword	Additive	Interactive	Holistic
Maths	$2 + 2 = 4$	$2 + 2 = 5$	$2 + 2 = \text{yellow}$
Food	a salad bowl (you can still see the individual ingredients)	a fondue or stew (melting pot) (ingredients are partially distinguishable)	a cake (the output is entirely different to the individual ingredients)

Based on: Choi, B. C. K., & Pak, A. W. P. (2006). Multidisciplinarity, interdisciplinarity and transdisciplinarity in health research, services, education and policy: 1. Definitions, objectives, and evidence of effectiveness. *Clinical & Investigative Medicine*, 29(6), 351-364.



Intradisciplinary

Multidisciplinary*

Crossdisciplinary*

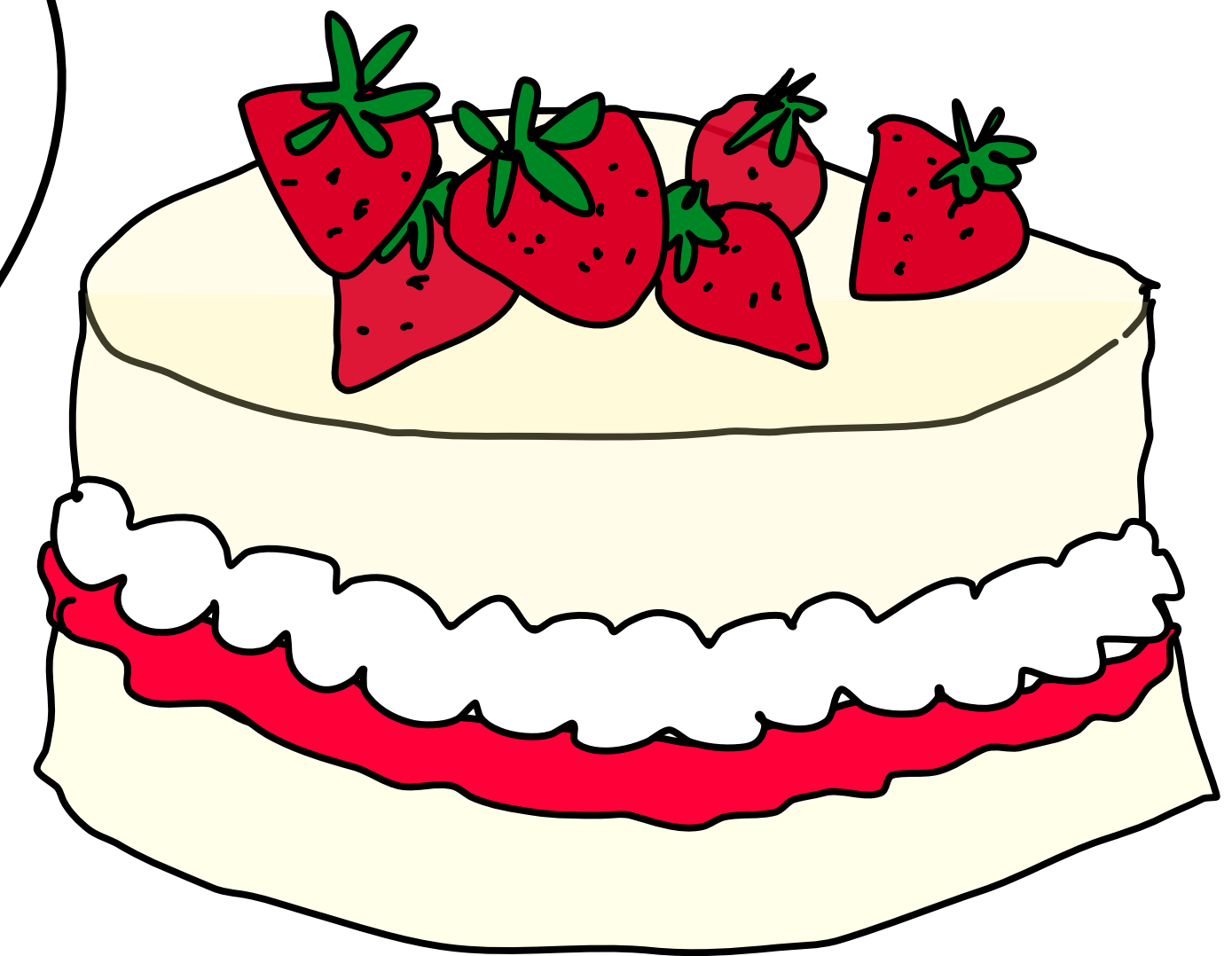
Interdisciplinary

transdisciplinary

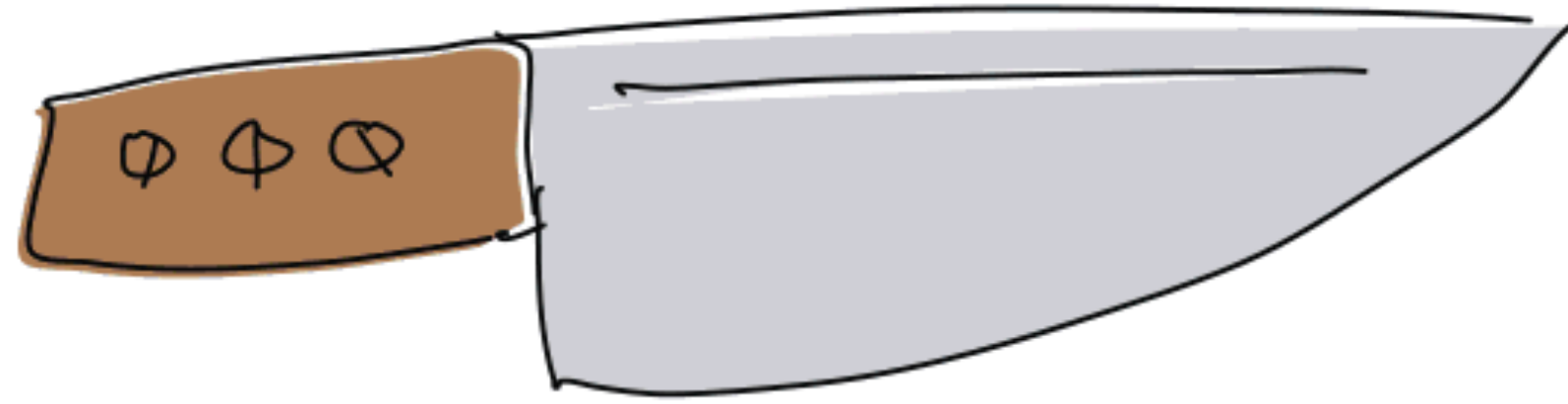
Based on: Jensenius, A. (2012, March 12).
Disciplinarity: Intra, cross, multi, inter,
trans. *Alexander Refsum Jensenius*. [http://
www.arj.no/2012/03/12/disciplinarity-2/](http://www.arj.no/2012/03/12/disciplinarity-2/)

*note these are
reversed compared
to other literature

eat your
meal in order:
Salad, Stew and
then CAKE!



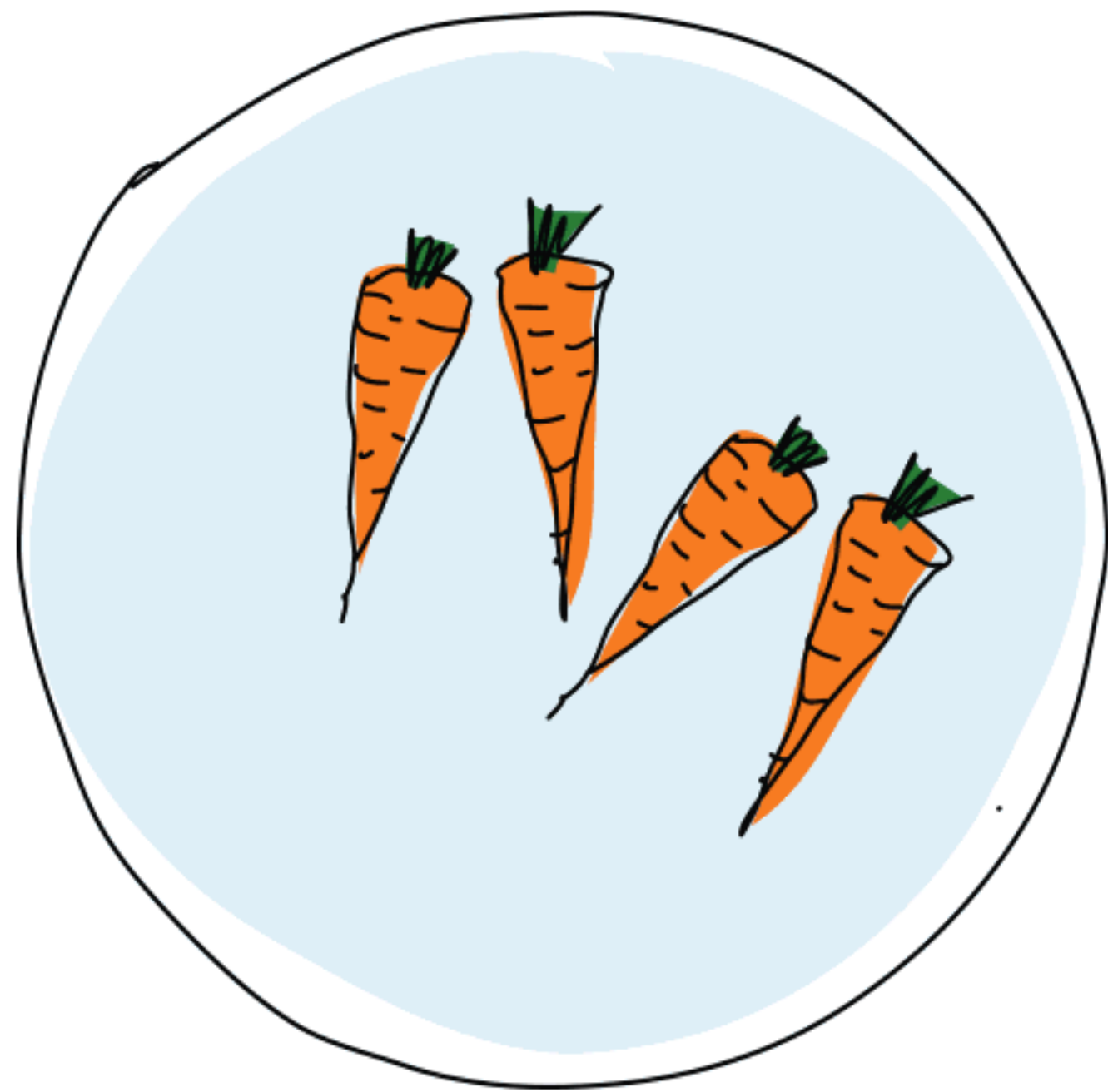
Making a meal of
disciplinarity
combinations...



Or, how....

I Can Make It Tasty !
- - - - -

Intradisciplinary



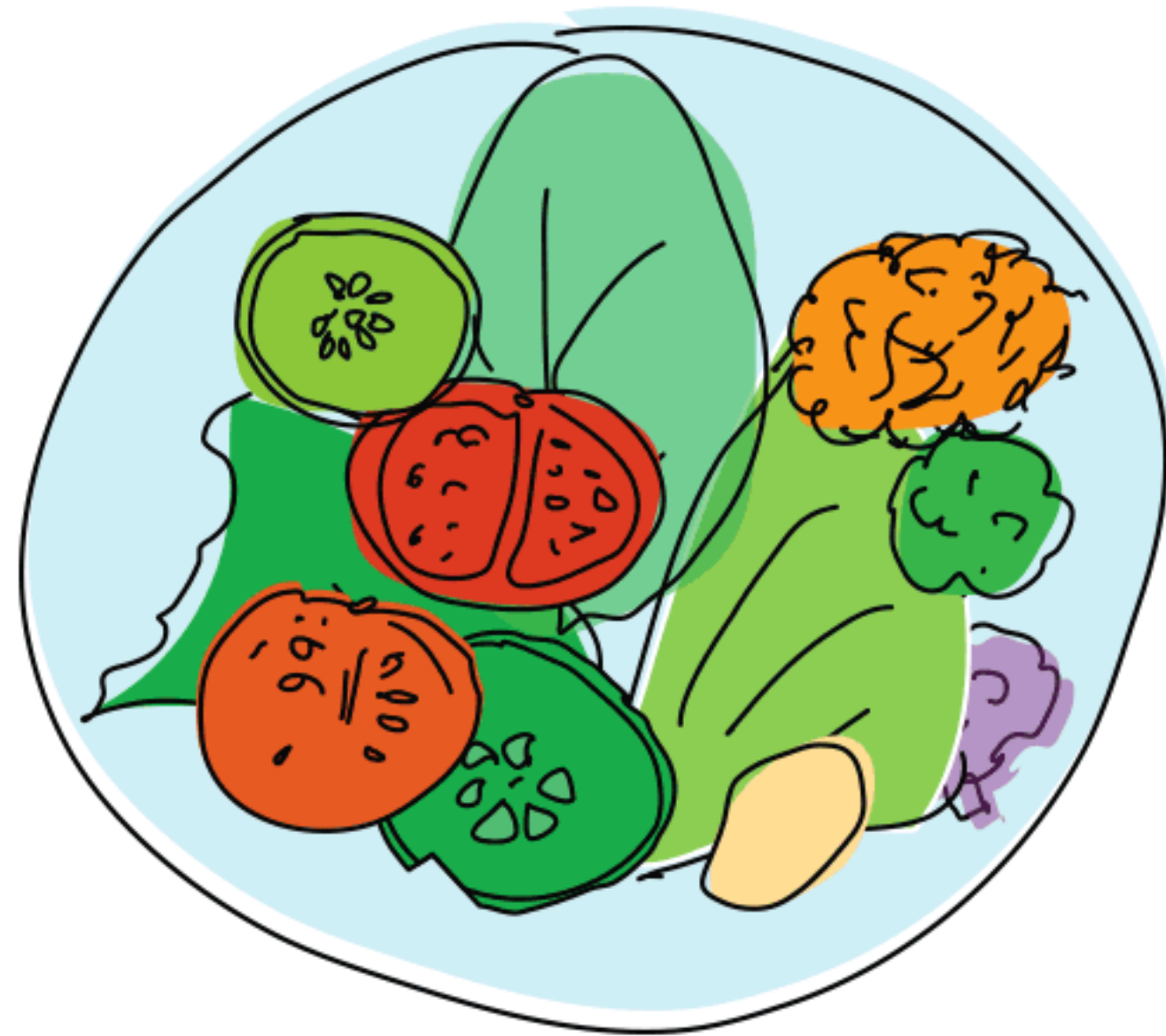
Intradisciplinary working is within one discipline. Like a single ingredient, clearly distinguishable..

Cross di'sciplinary



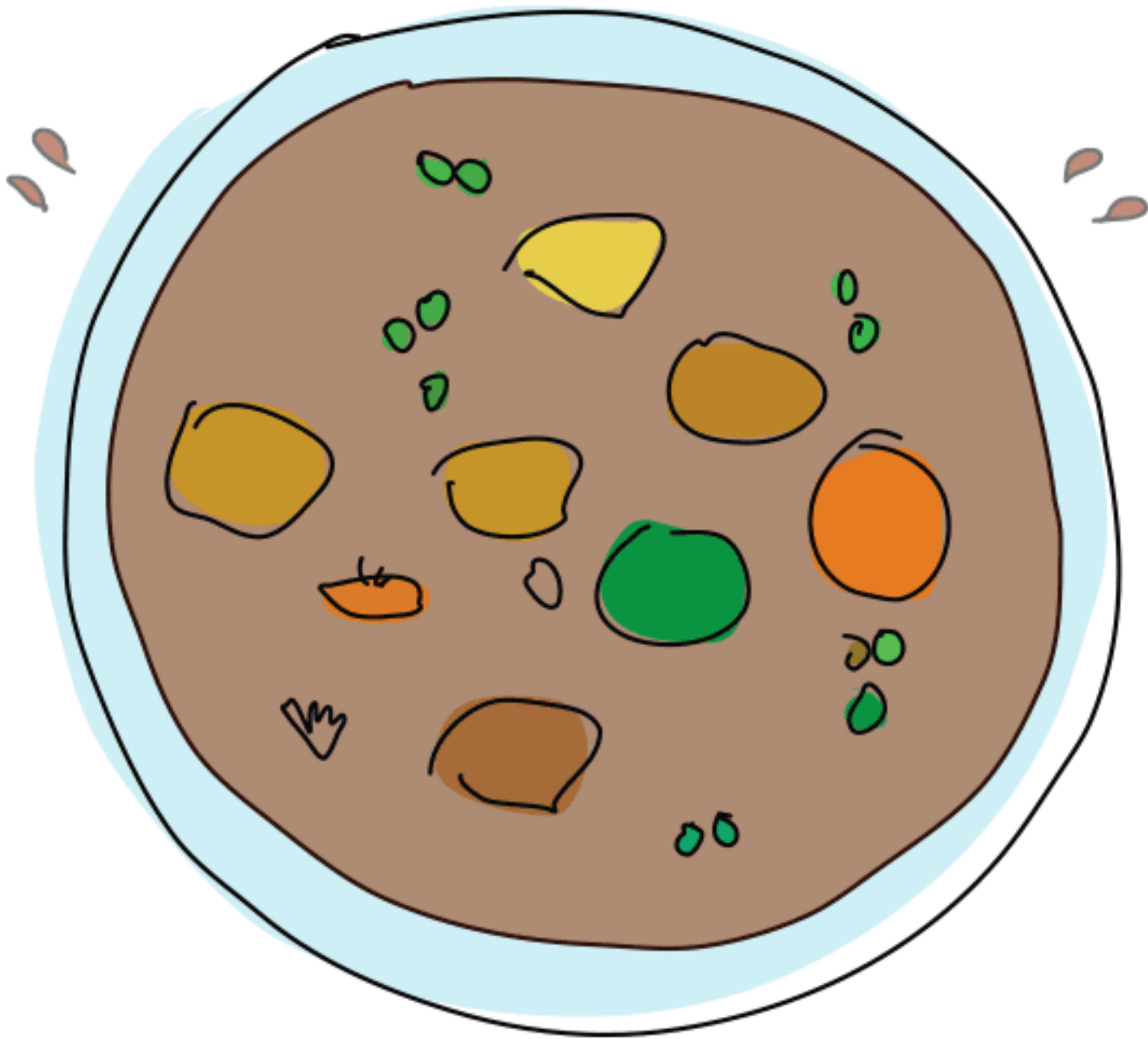
Crossdisciplinary working views one discipline from the frame of reference of another. It's like different ingredients on a plate, but without chopping them up and mixing them..

Multidisciplinary



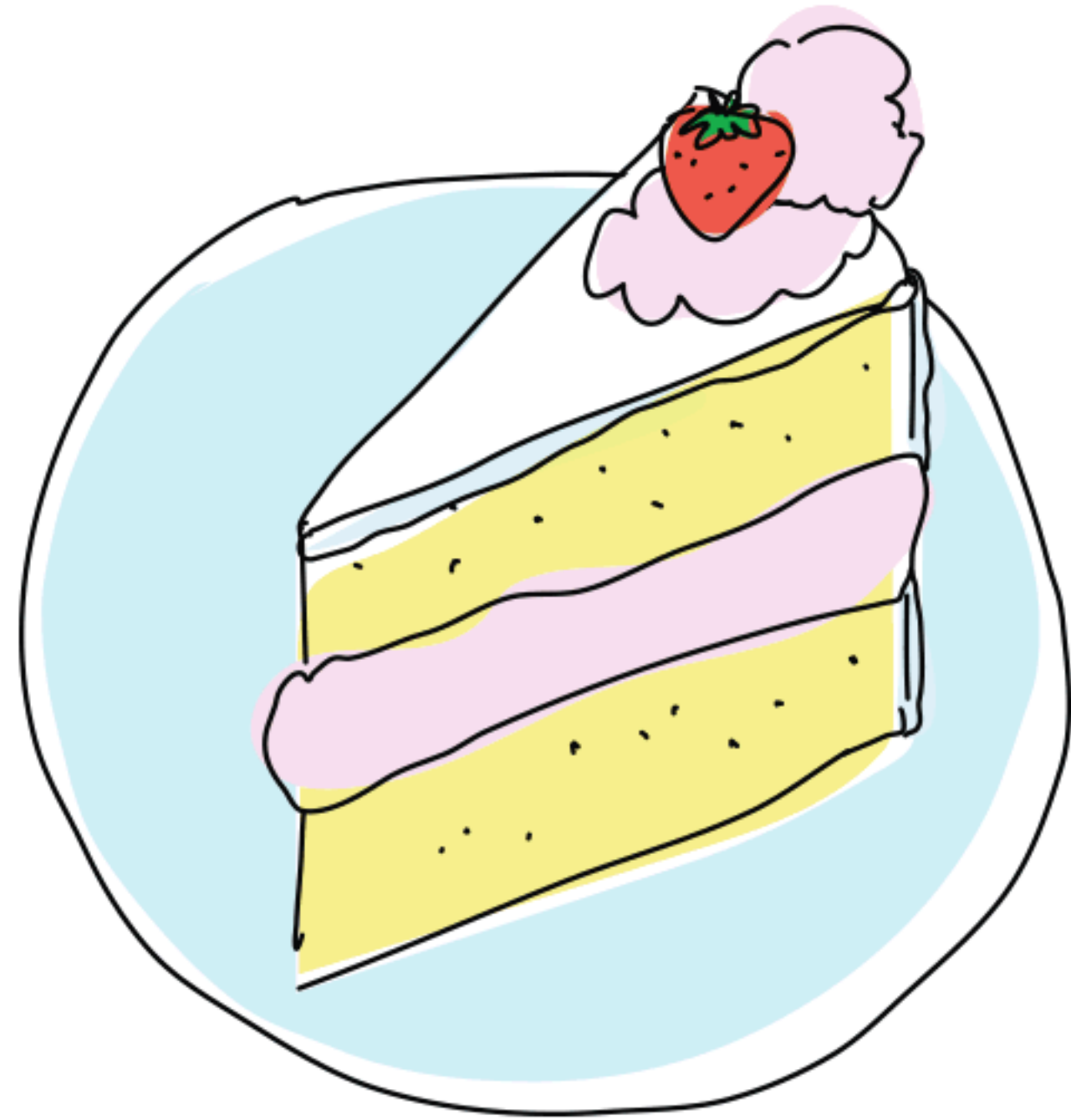
Multidisciplinary working brings disciplines together so they can learn from each other, drawing on the mix of disciplinary knowledge. It's like a salad: the original ingredients are intact, but the flavours begin to blend...

Interdisciplinary

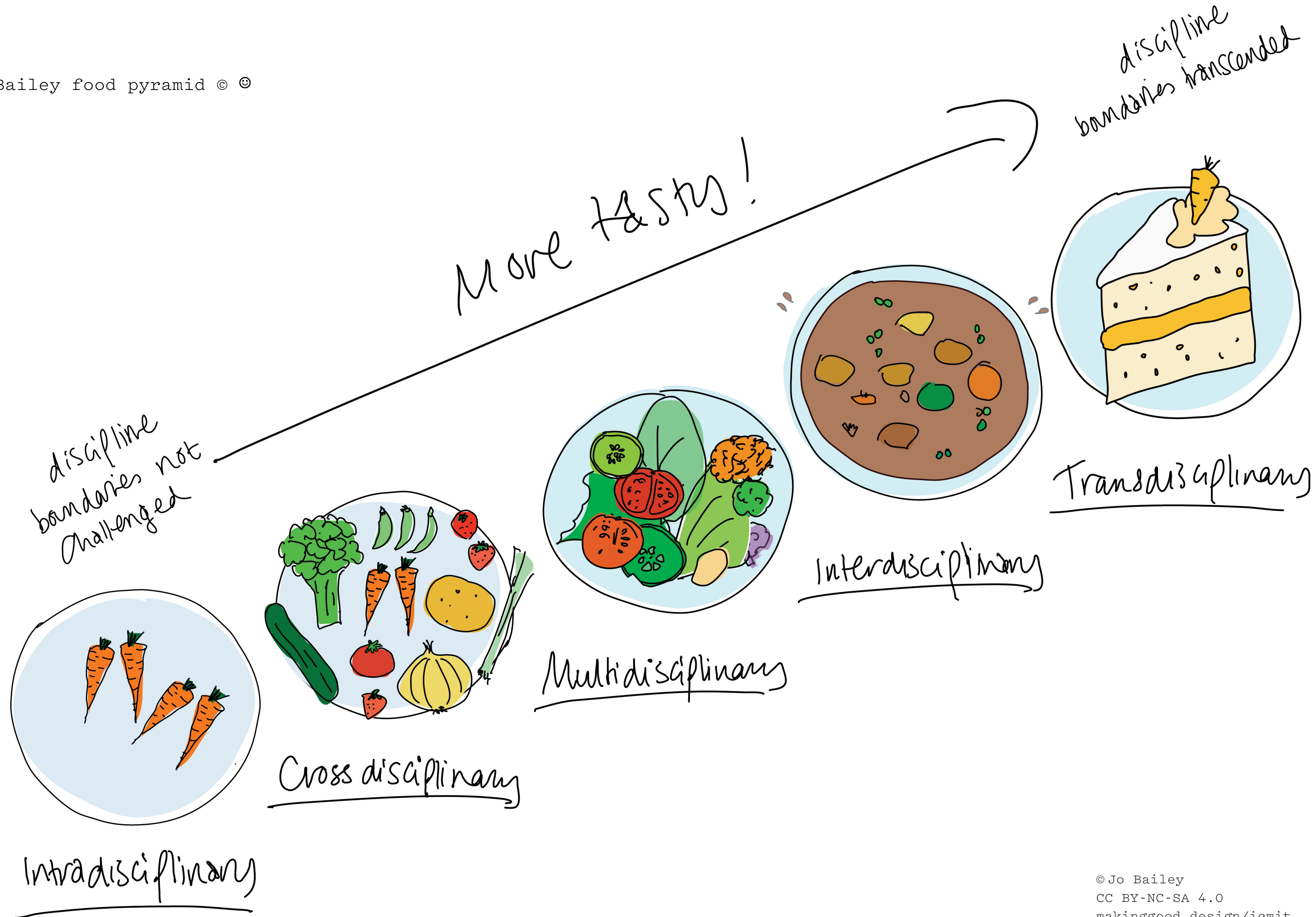


Interdisciplinary working starts to take a new form, integrating knowledge and methods from different disciplines and synthesising into a new whole. It's like a stew: the original ingredients are still partly distinguishable, but the overall is a blended pot of mixed flavours..

Transdisciplinary



Transdisciplinary working produces a new, novel form or way of working beyond the original disciplinary boundaries. It's like a cake: you can no longer see the form of the ingredients as they have taken on a different shape and flavour.



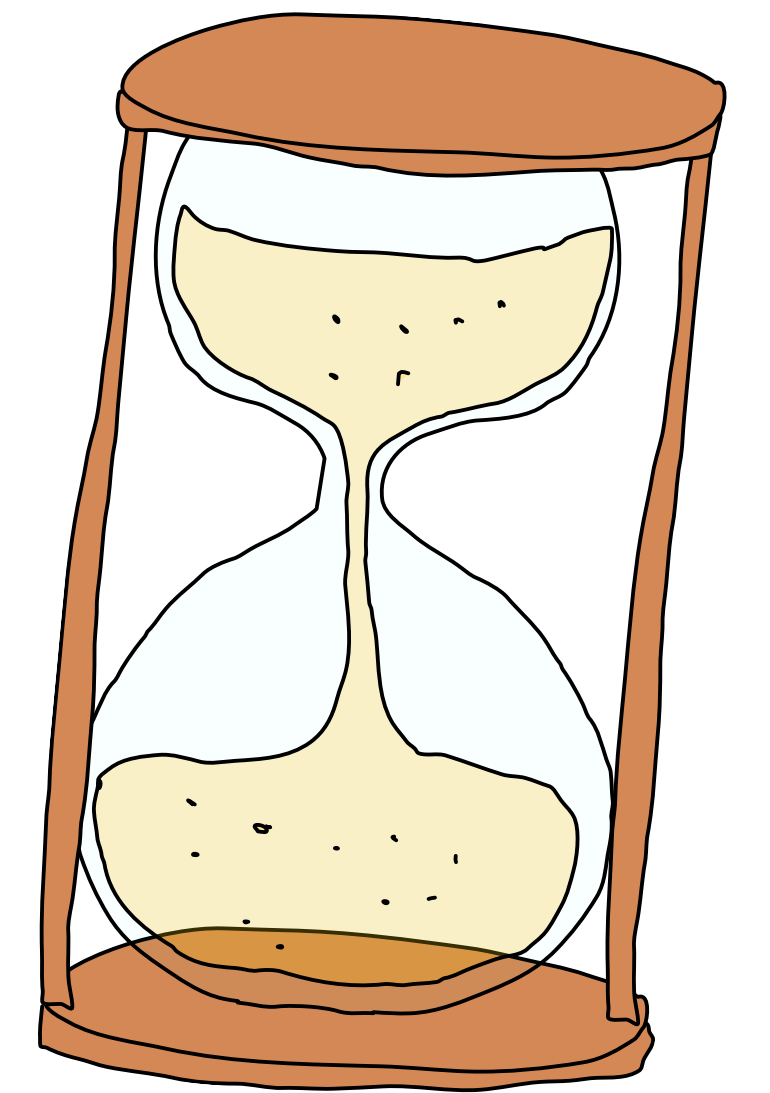
So what might help us move
towards transdisciplinary
practice?

Respect

Beaumont, N. (Ed.). (2020). *Demystifying interdisciplinary working (in Valuing Nature)* (Valuing Nature Paper No. VNP25V). Valuing Nature Network.
<https://valuing-nature.net/demystifying-interdisciplinary-working>

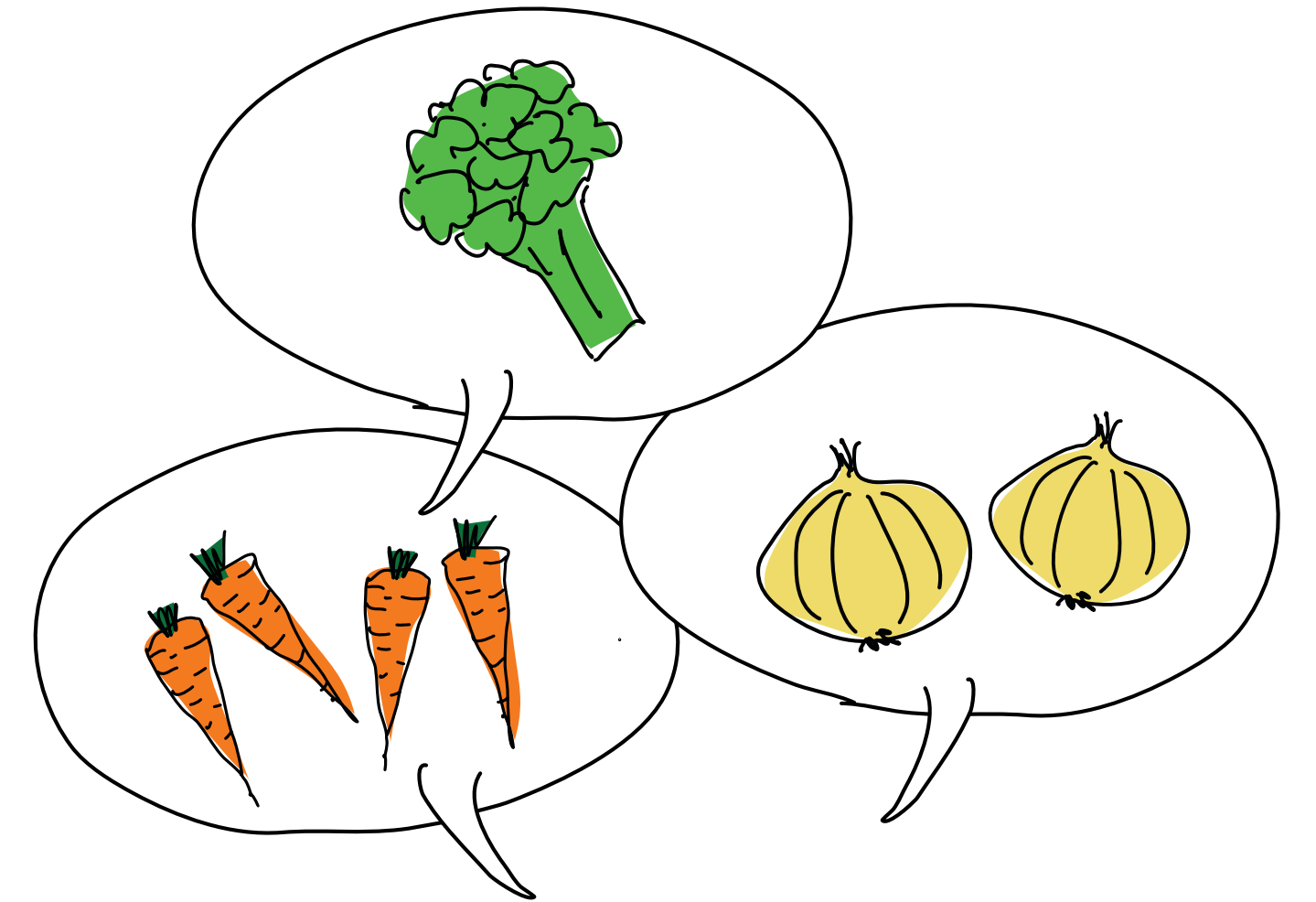


Time and resources

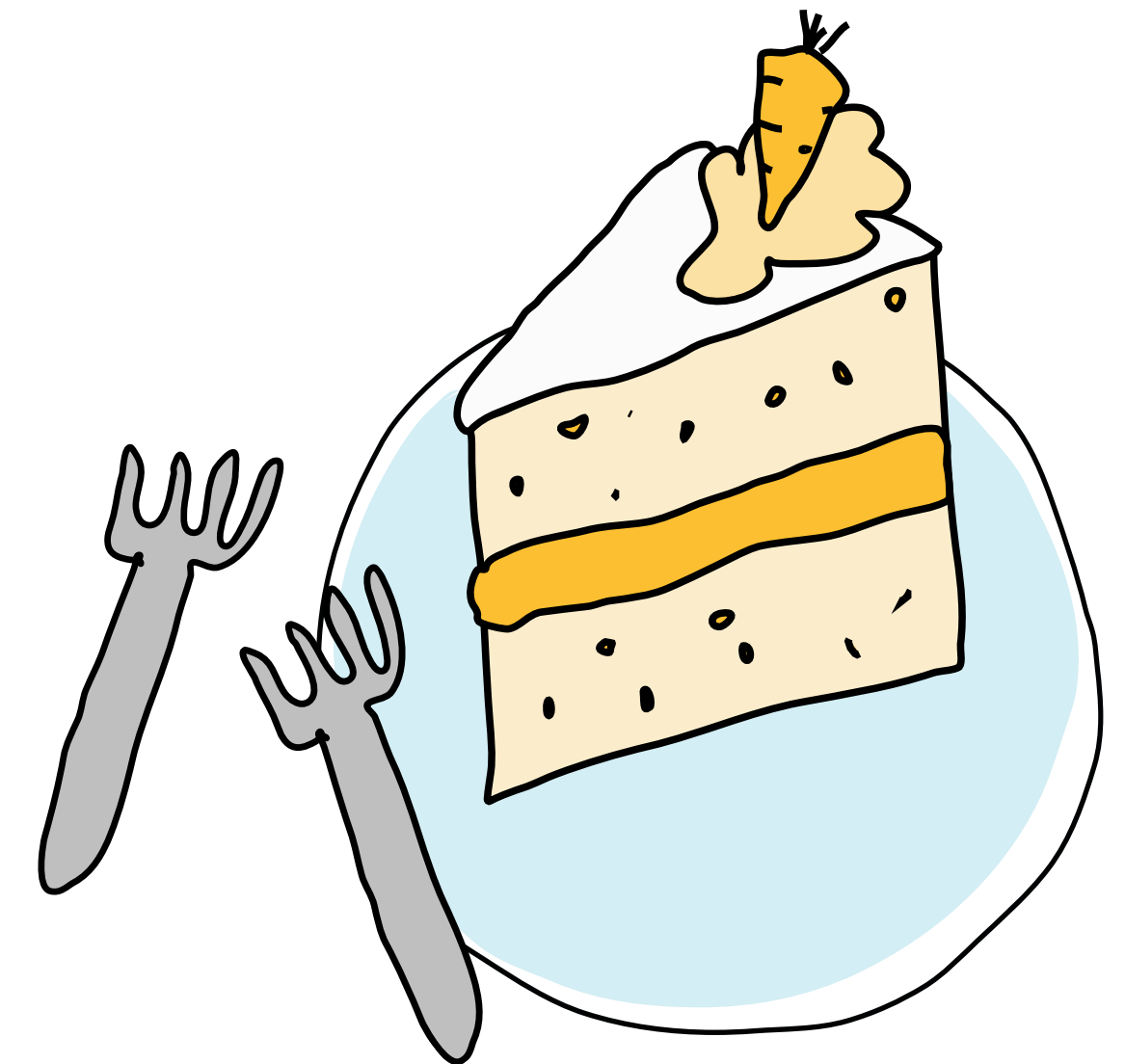


Communication

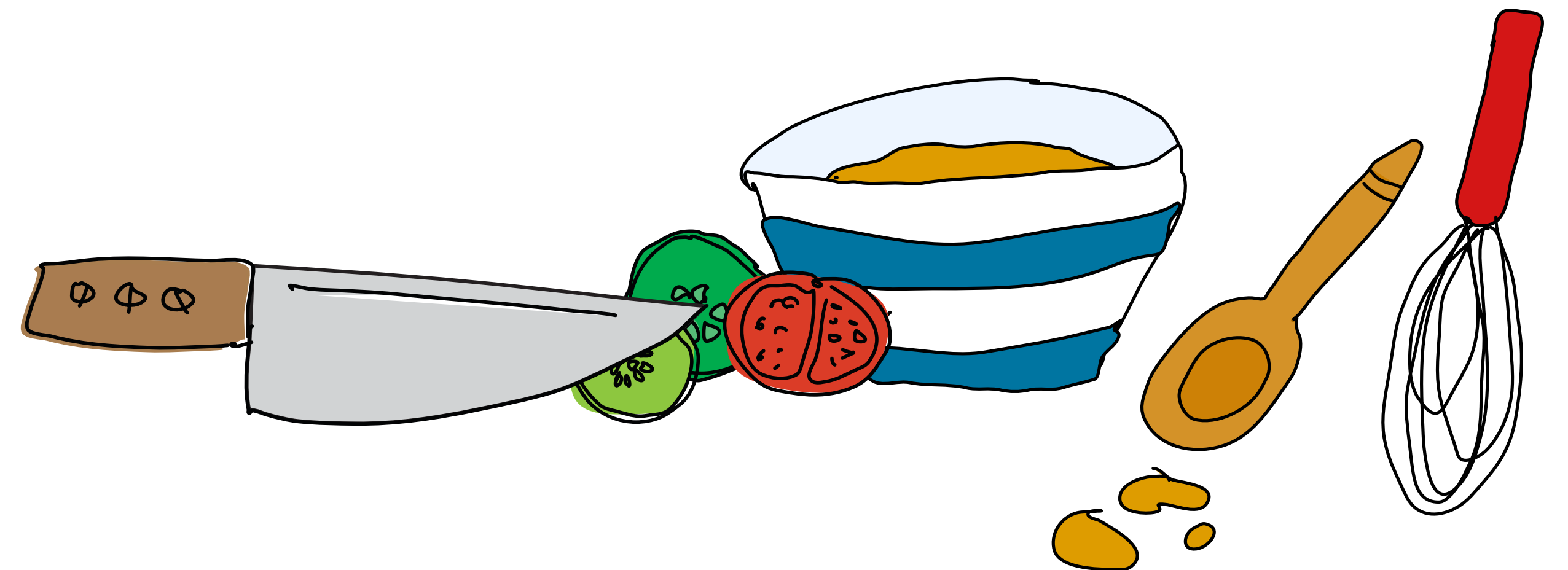
Bracken, L. J., & Oughton, E. A. (2006). 'What do you mean?' The importance of language in developing interdisciplinary research. *Transactions of the Institute of British Geographers*, 31(3), 371-382. <https://doi.org/10.1111/j.1475-5661.2006.00218.x>



Shared values

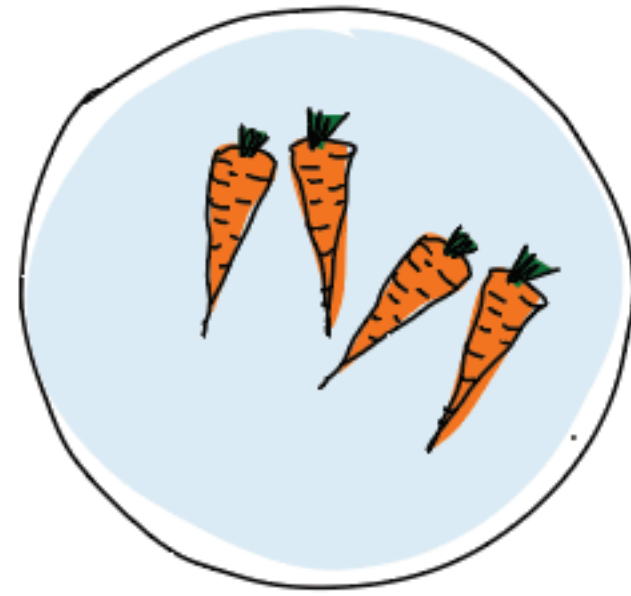


Prepare and adapt



I Can Make It Tasty!

Intradisciplinary



within one discipline

A single ingredient (aka, discipline)
- no mixing

Cross disciplinary



viewing one discipline from the perspective of another

a load of ingredients on their own...
[a pretty dull meal!]

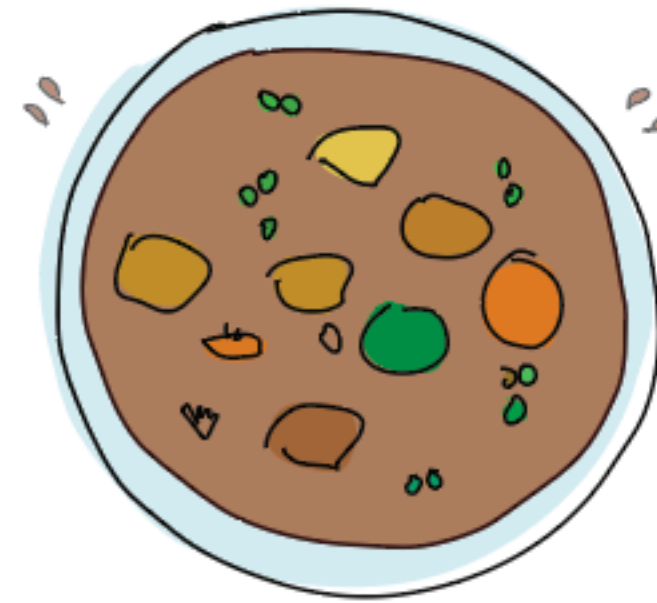
Multidisciplinary



Several different disciplines, each providing different perspectives...

... a salad bowl — ingredients remain intact and distinguishable

Interdisciplinary



Integration of disciplinary contributions is required...

.. a stew!
ingredients mush into each other and are only partially distinguishable

Transdisciplinary



a unity of intellectual frameworks beyond disciplinary boundaries

... a CAKE!
the ingredients are no longer distinguishable and the final 'product' is of a different kind

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https://doi.org/10.1007/978-1-4614-3858-8_337

Beaumont, N. (Ed.). (2020). *Demystifying interdisciplinary working (in Valuing Nature)* (Aluing Nature Paper No. VNP25V). Valuing Nature Network. <https://valuing-nature.net/demystifying-interdisciplinary-working>

Bracken, L. J., & Oughton, E. A. (2006). 'What do you mean?' The importance of language in developing interdisciplinary research. *Transactions of the Institute of British Geographers*, 31(3), 371-382.

<https://doi.org/10.1111/j.1475-5661.2006.00218.x>

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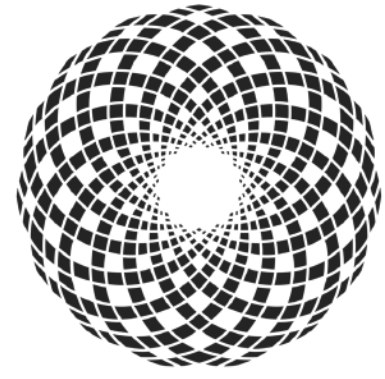
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Data ■ Knowledge ■ Insight

Kia ora!

Kate Hannah
+ Jo Bailey

@punahamatatini
@knhannah
@jo_bailey

