

An enactive semiology based process to explore large heterogeneous datasets

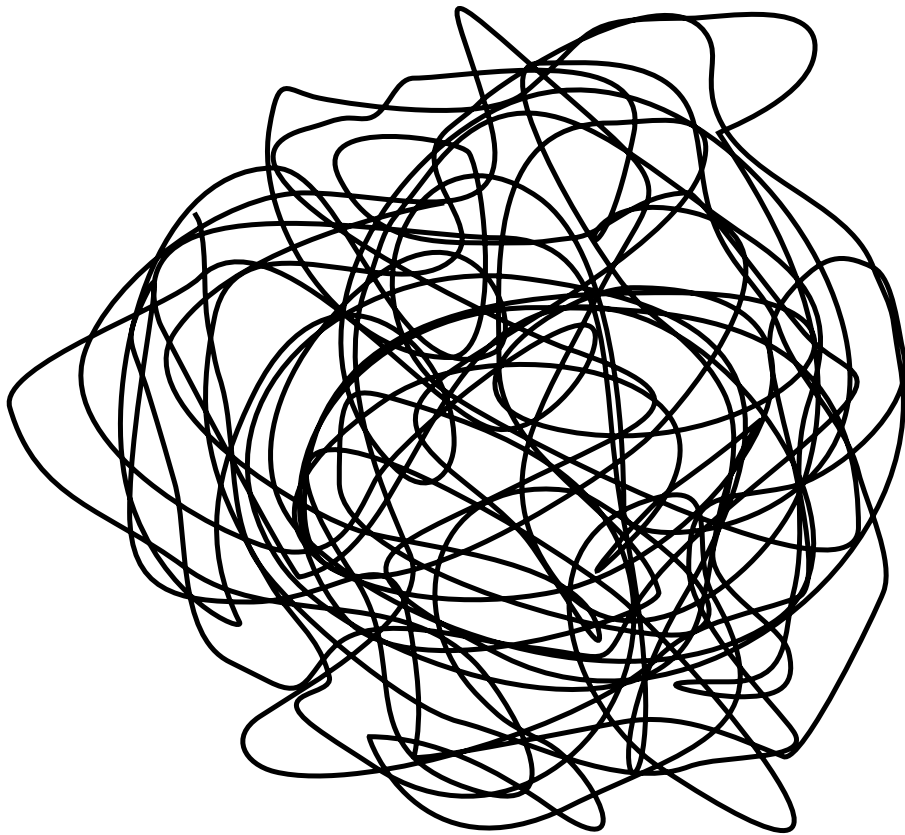


Cognitive Research &
Enactive Design



utc
Université de Technologie
Compiègne

Explore complex systems and make sense of it

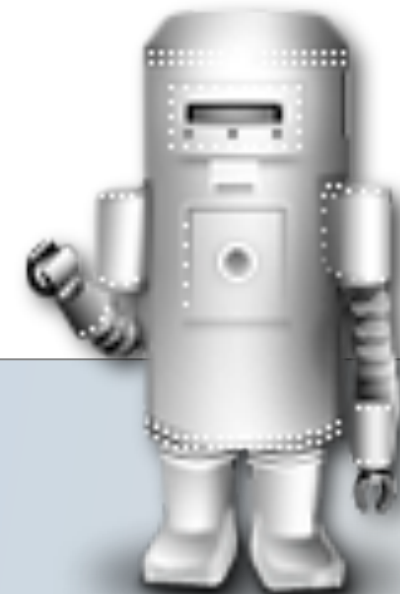


- ▶ Discovering the structure, building a model
- ▶ On any kind of system (natural or artificial)

Various ways of doing it



Human
centred



automatic

Exploratory Data Analysis (EDA) and visual analytics



Far better an approximate answer to the right question, which is often vague, than an exact answer to the wrong question, which can always be made precise



J.W.Tukey (1962, page 13), "The future of data analysis". Annals of Mathematical Statistics 33(1), pp. 1-67.

- ▶ Providing and maximising insights
- ▶ Through the use of visualisations
- ▶ creating hypothesis and validating them

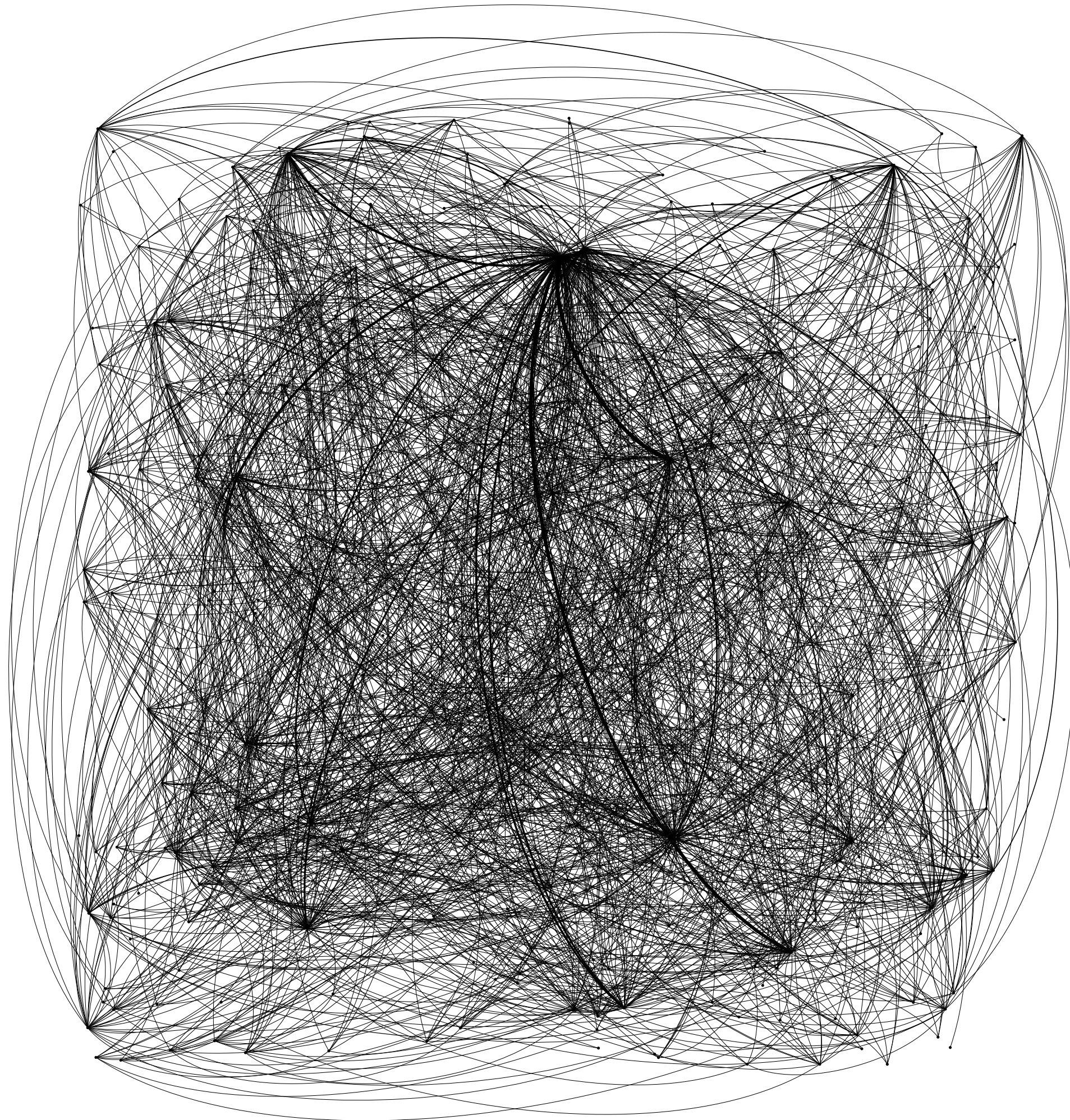
Mantra

Shneiderman's mantra :

Overview first, zoom and filter, and then details-on-demand

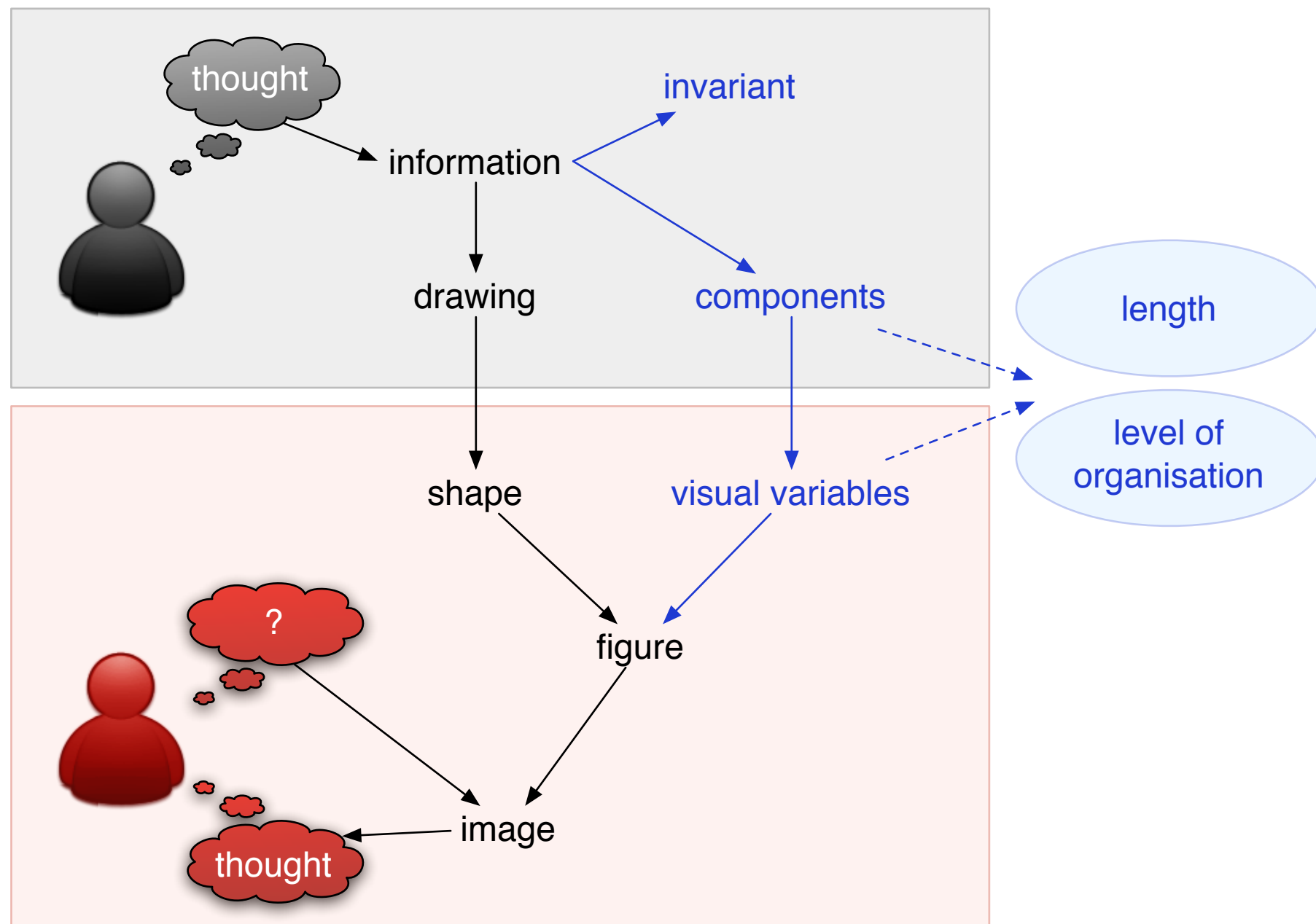
EDA mantra :

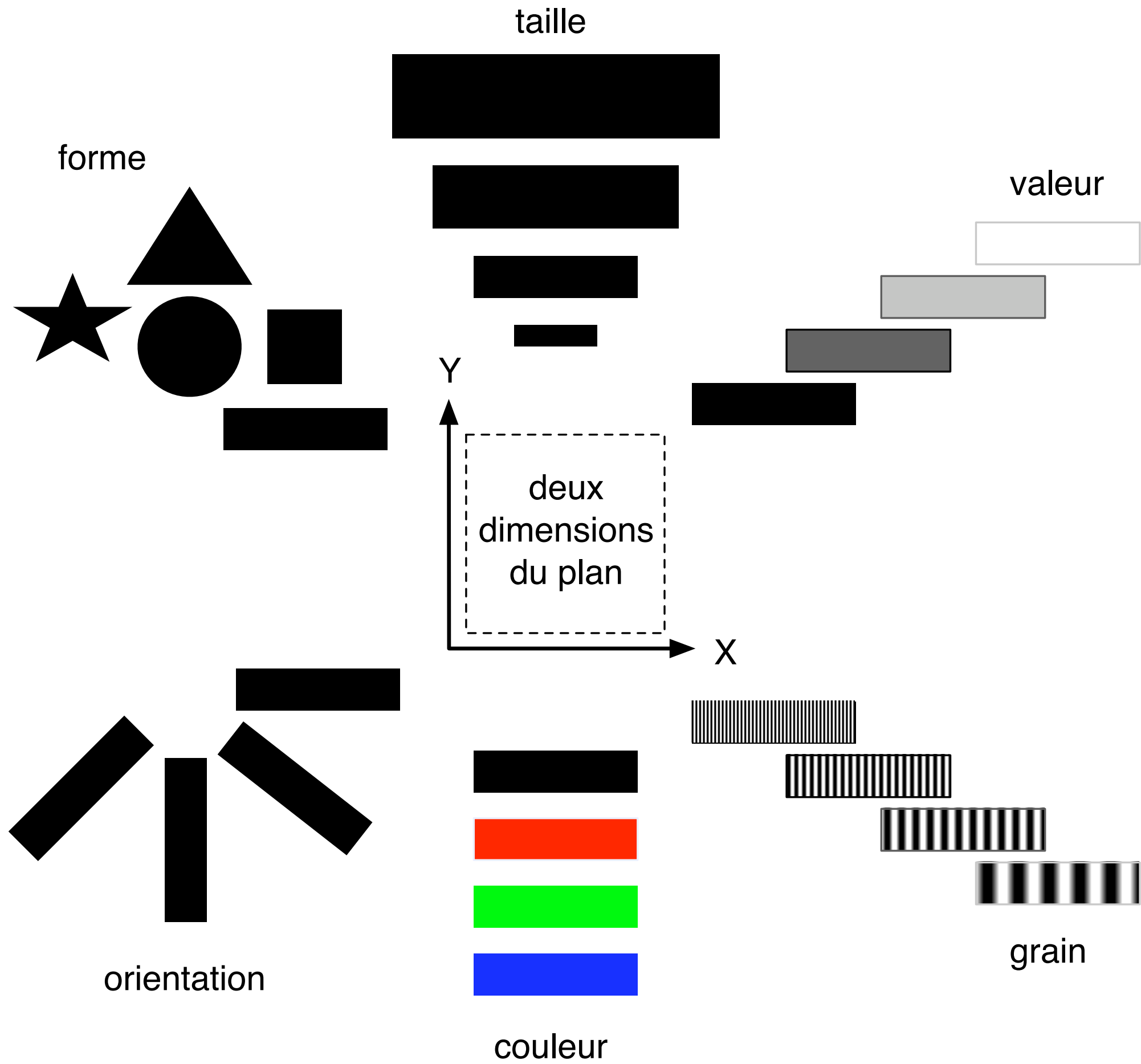
See the whole, zoom and focus, attend to particular

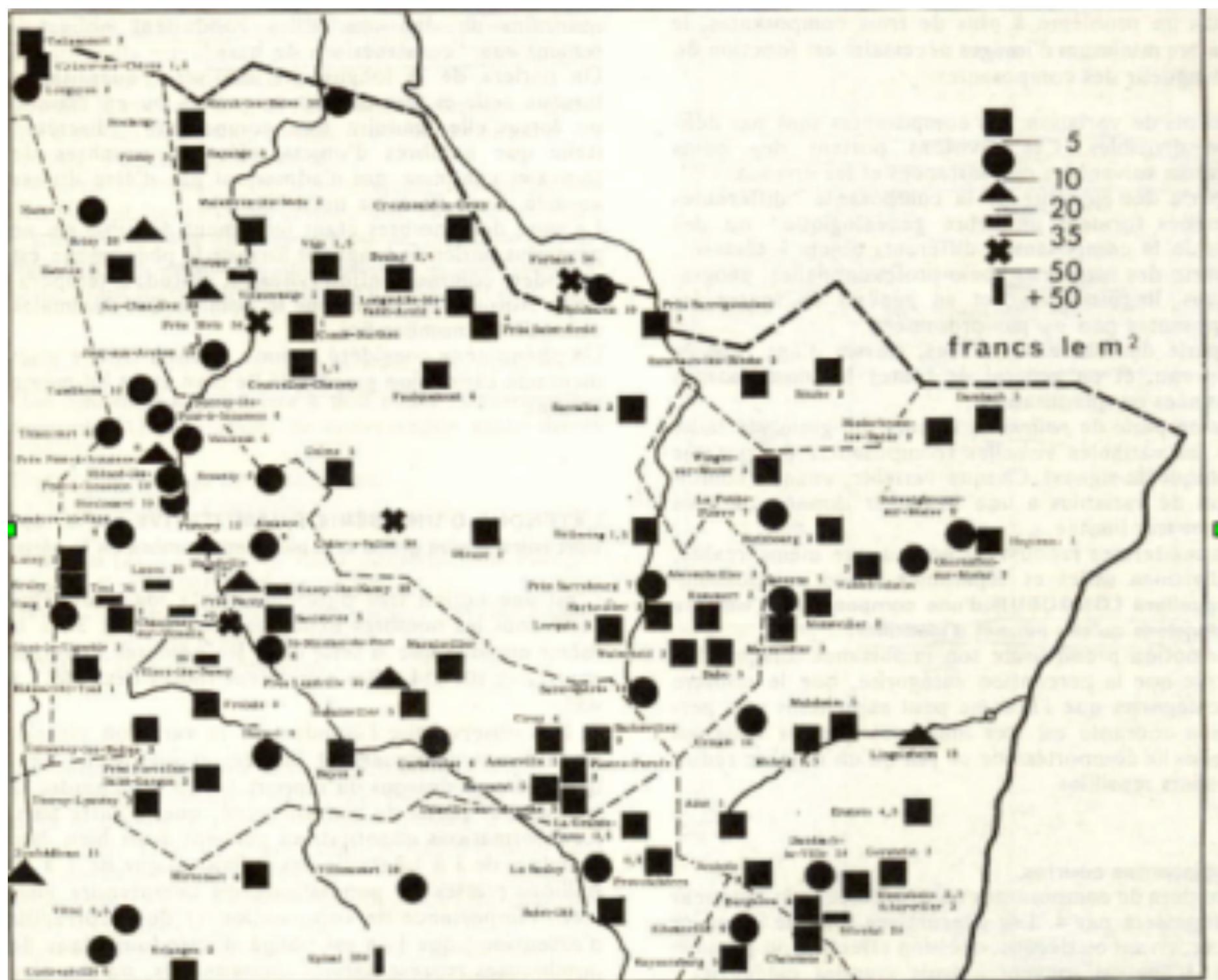




Role of semiology

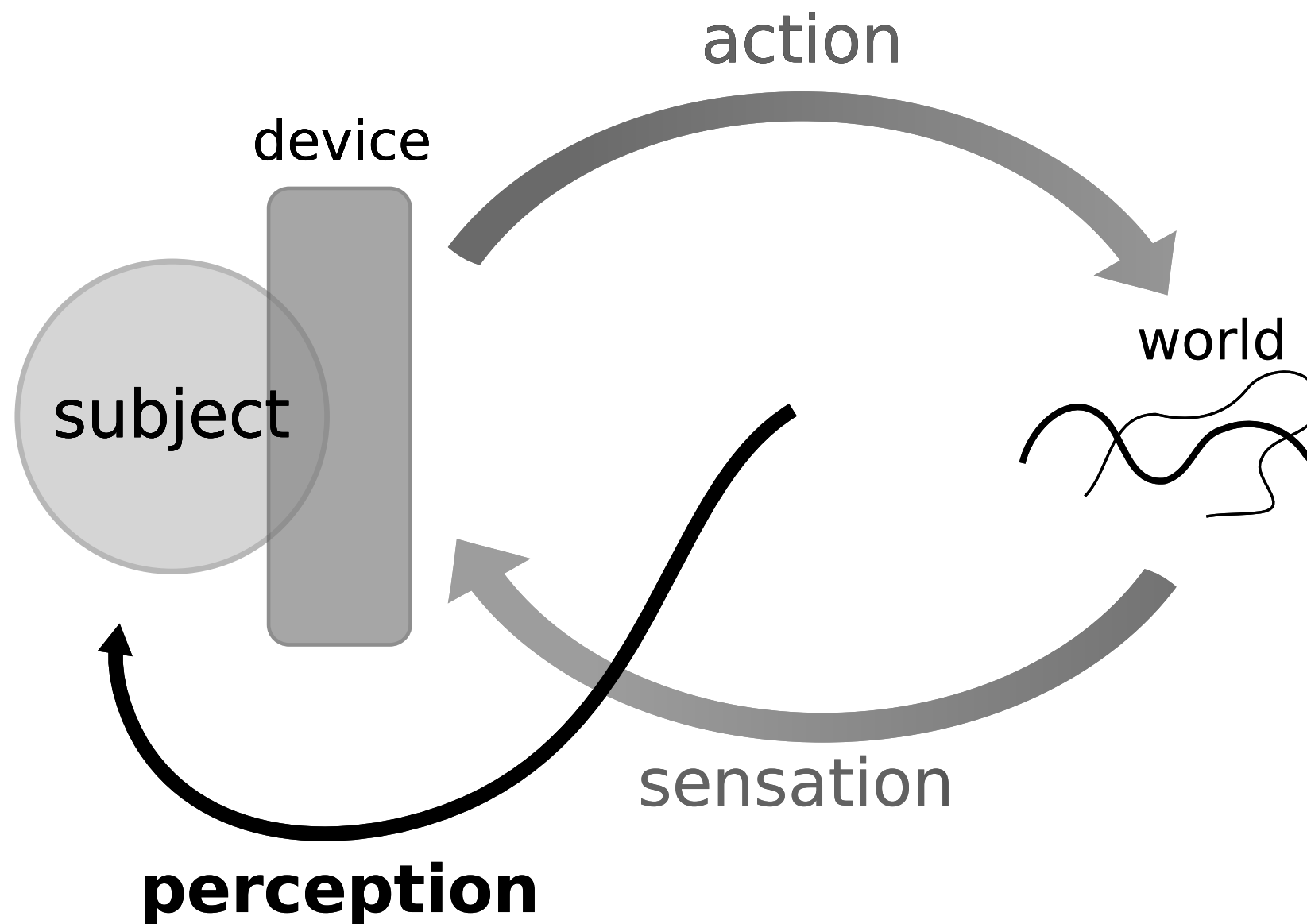




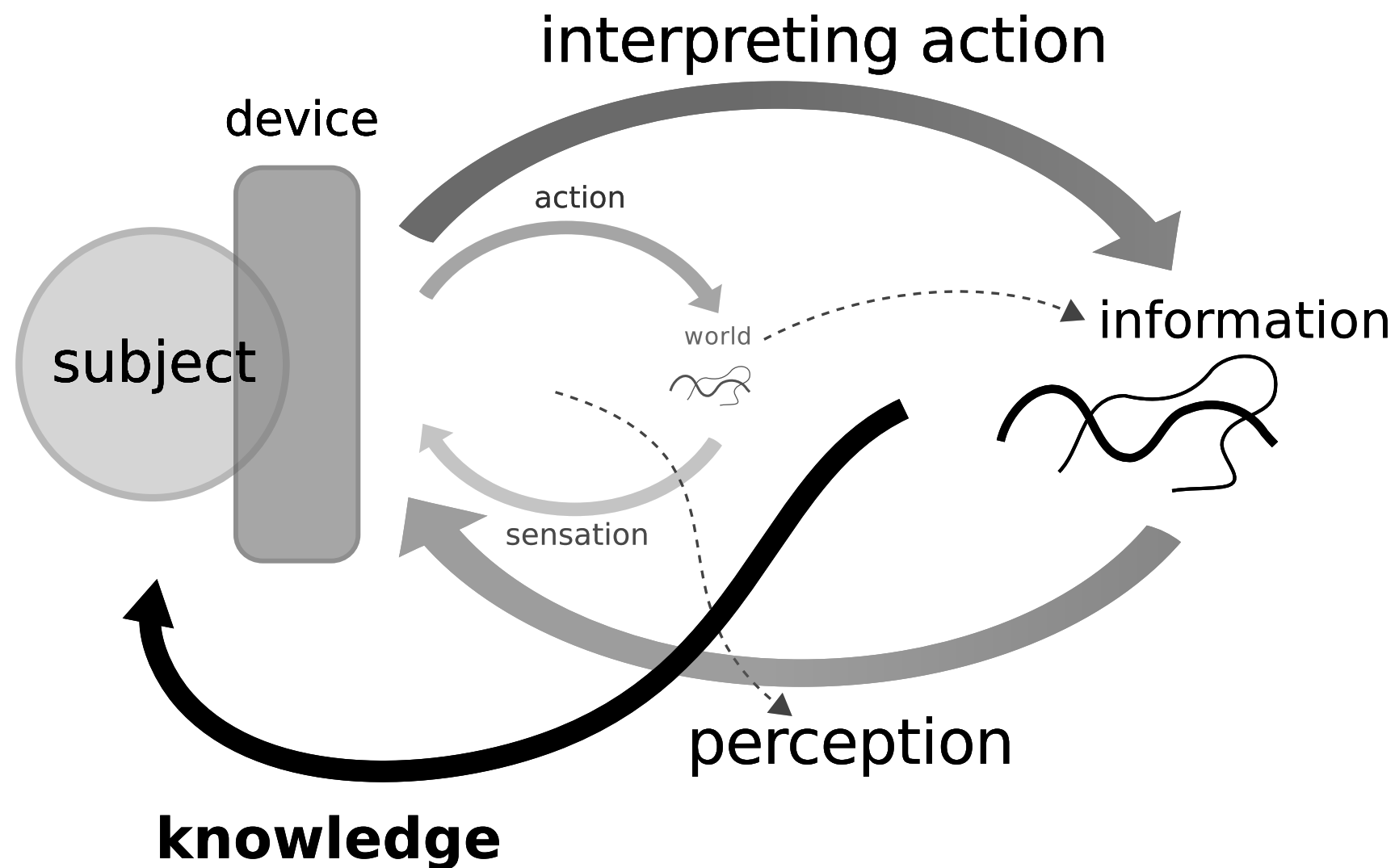


PRIX DU TERRAIN DANS LA FRANCE DE L'EST d'après l'hebdomadaire "ELLE" . Paris 1959

Impact of perception on cognition: enactive approach

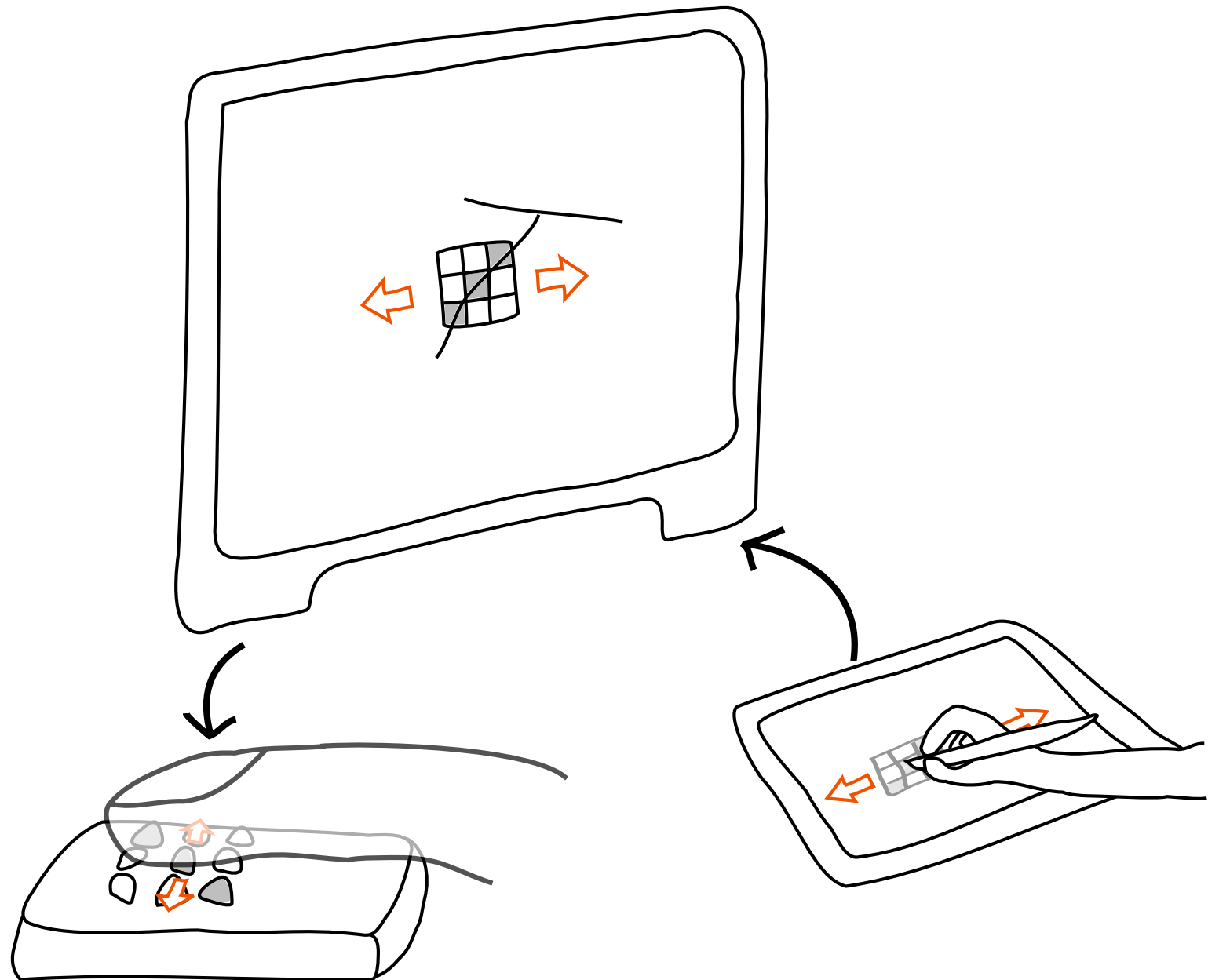


Impact of perception on cognition: enactive approach

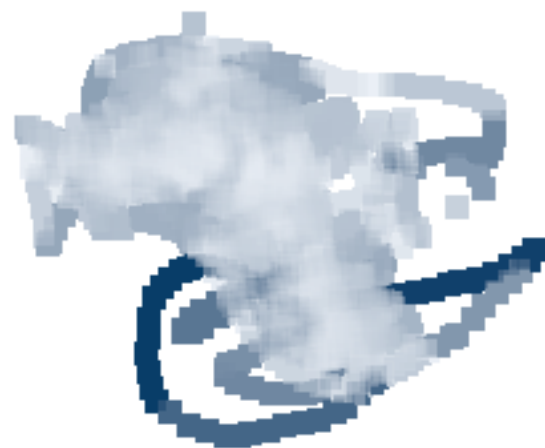
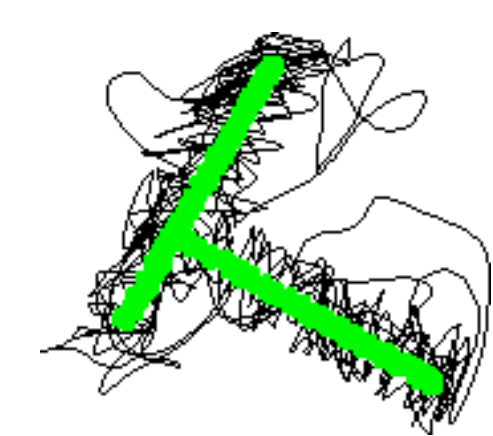




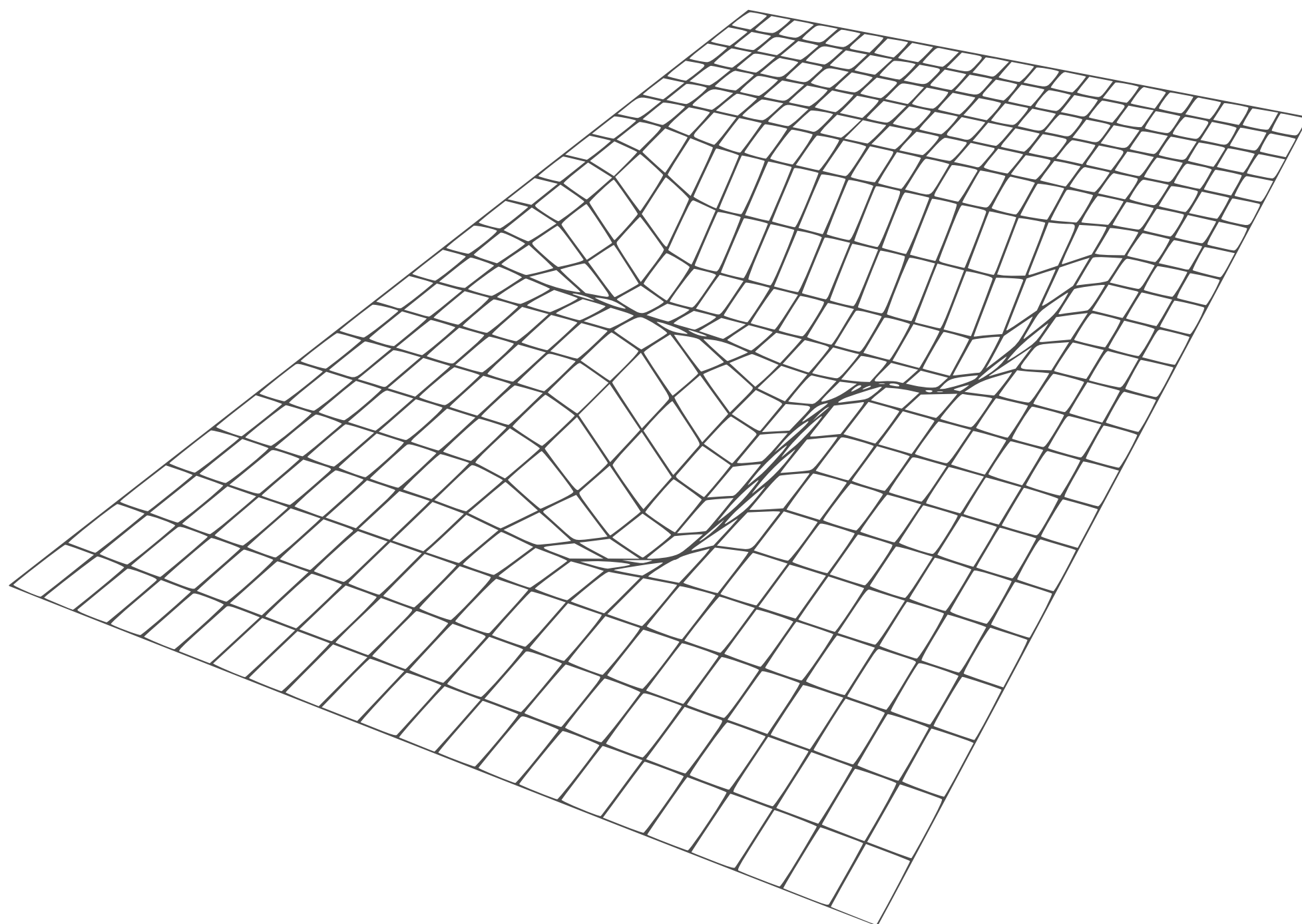
Line experiment



Maps of amplitude



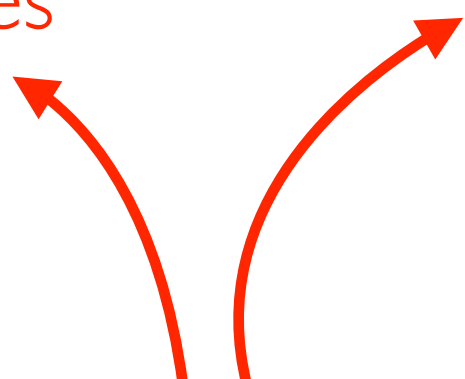
Maps of amplitude



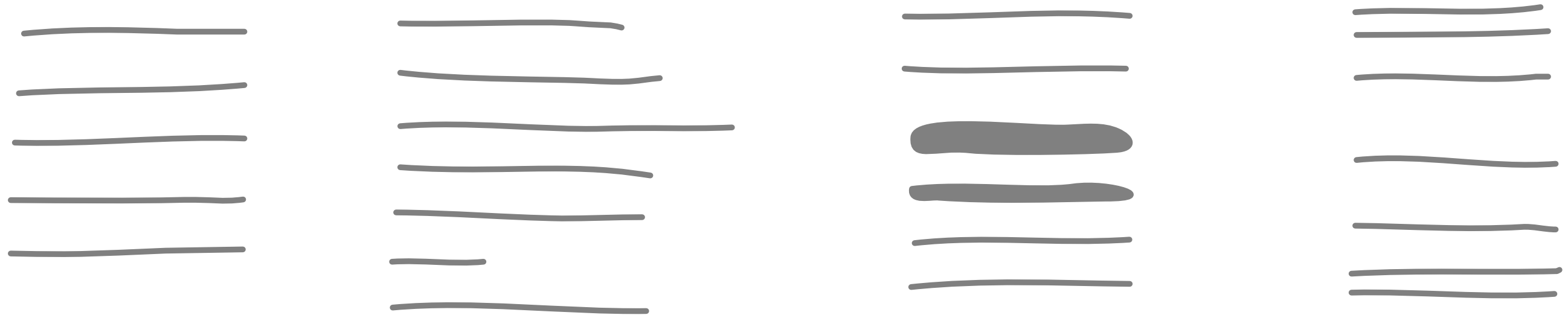
Support by lines

Either local or global

From **gestures** to guidances



The diagram consists of two red curved arrows originating from the word 'gestures' in the main title. One arrow points upwards and to the left towards the text 'Support by lines'. The other arrow points upwards and to the right towards the text 'Either local or global'.



lists

YAHOO! SEARCH [Web](#) [Images](#) [Video](#) [Audio](#) [Directory](#) [Local](#) [News](#) [Shopping](#) [More »](#)

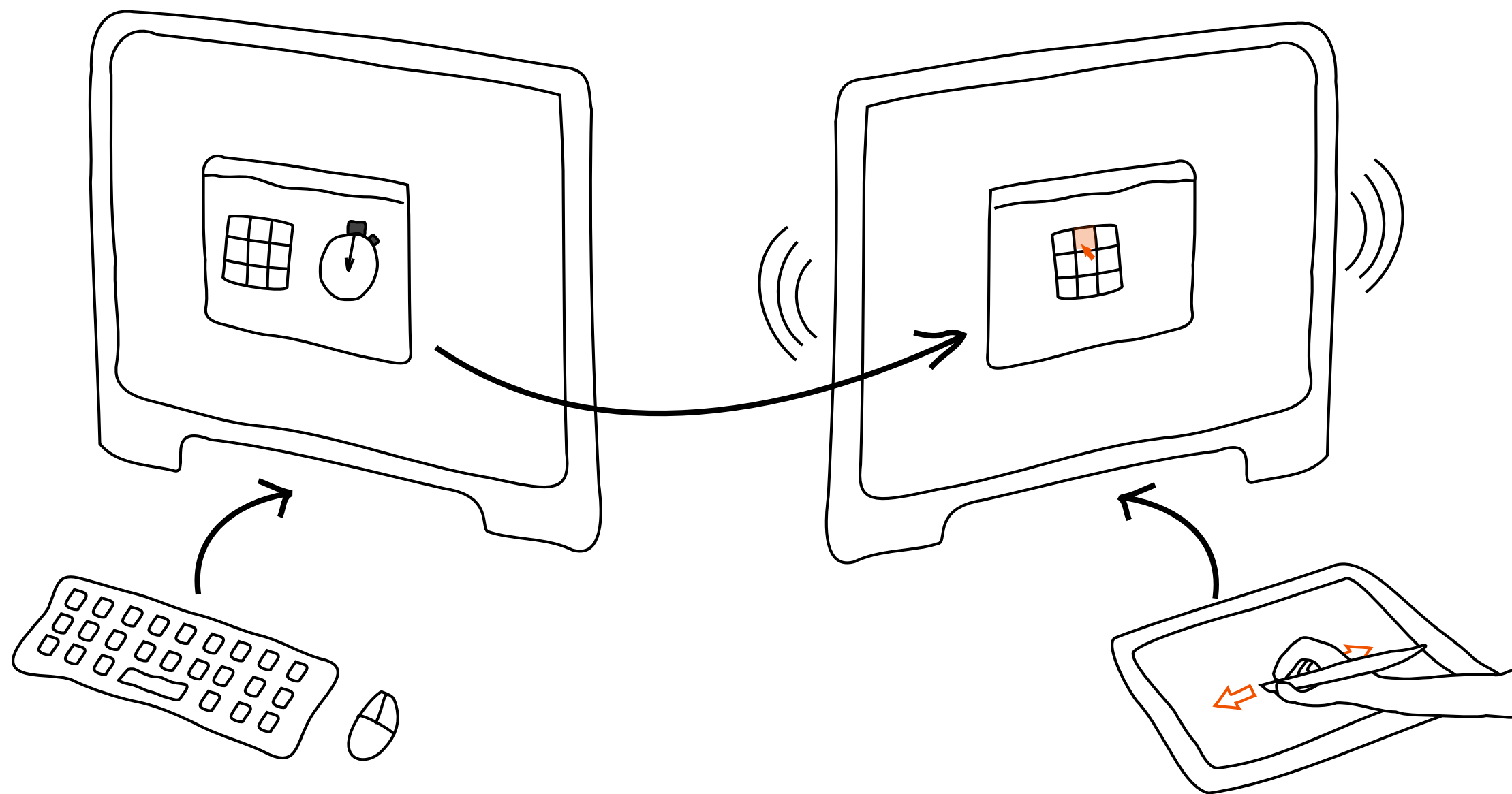
abortion blog

[My Web](#) [Answers](#) **BETA**

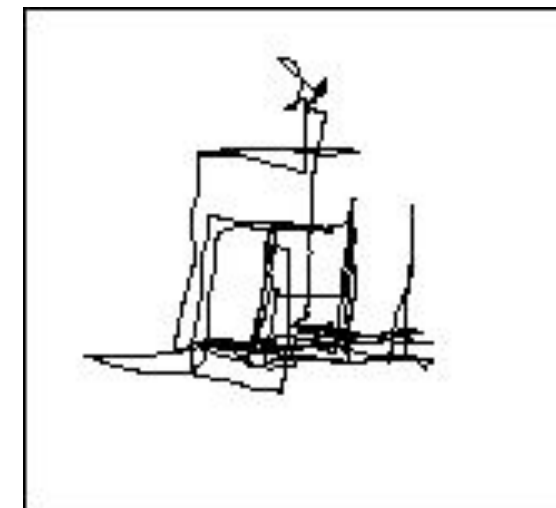
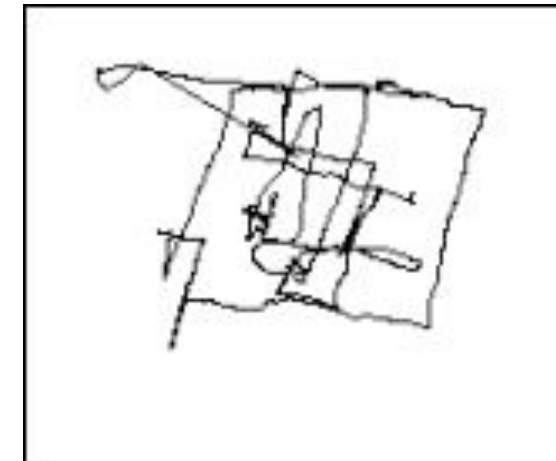
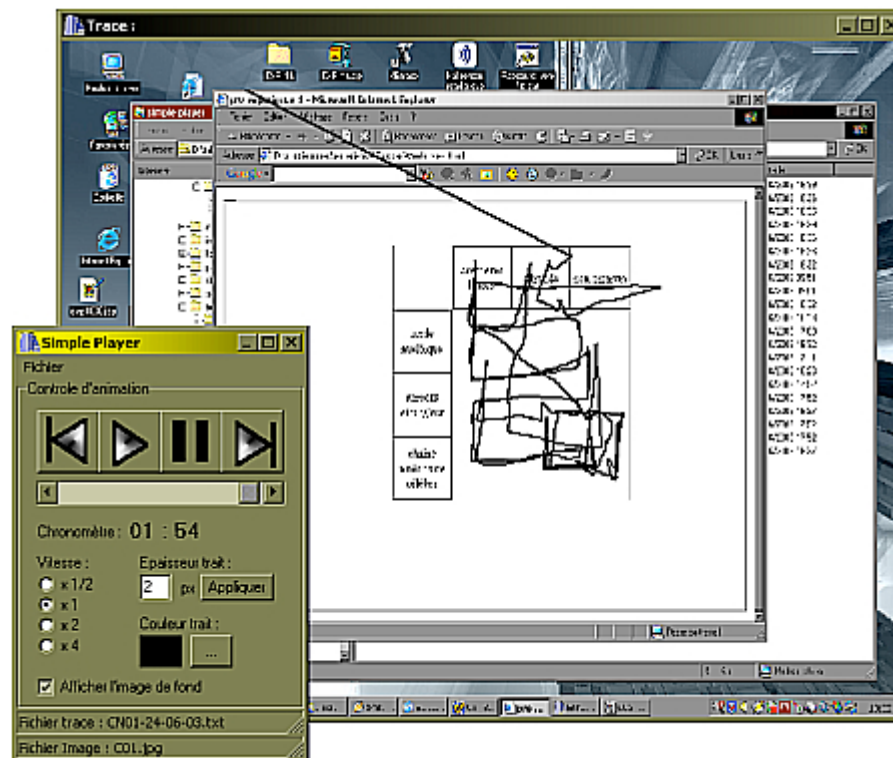
Search Results Results 1 - 10 of about 11,700,000

1. [After abortion](#) 
A weblog focusing on life after **abortion**: news, opinion, personal experience, resources ... The fundamental attribution error and post-**abortion** distress. A lot of women I know, after an **abortion**, think ... The **Abortion Watch blog** captures a great story about Brenda Landwehr, a ...
[afterabortion.blogspot.com](#) - 82k - [Cached](#) - [More from this site](#) - [Save](#)
2. [Welcome to Hope After Abortion](#) 
A site offering healing and hope to those grieving after **abortion**. Find healing, joy, forgiveness through Project Rachel's free, confidential counseling.
[hopeafterabortion.com](#) - 12k - [Cached](#) - [More from this site](#) - [Save](#)
3. [After abortion: 04/25/2004 - 05/01/2004](#) 
A weblog focusing on life after **abortion**: news, opinion, personal experience, resources ... holding various signs, including some that read "I regret my **abortion**". The whole thread is of interest ... year that this **blog** has been in existence. If **abortion** is a grave ...
[afterabortion.blogspot.com/2004_04_25_afterabortion_archive.html](#) - 132k - [Cached](#) - [More from this site](#) - [Save](#)
4. [RealChoice](#) 
... Siobhan O'Connor leave a message at the **blog** of an **abortion** provider looking for young women 18-35 ... them a TV interview you can watch. After **Abortion blog** praises Rep ...
[realchoice.blogspot.com](#) - 120k - [Cached](#) - [More from this site](#) - [Save](#)

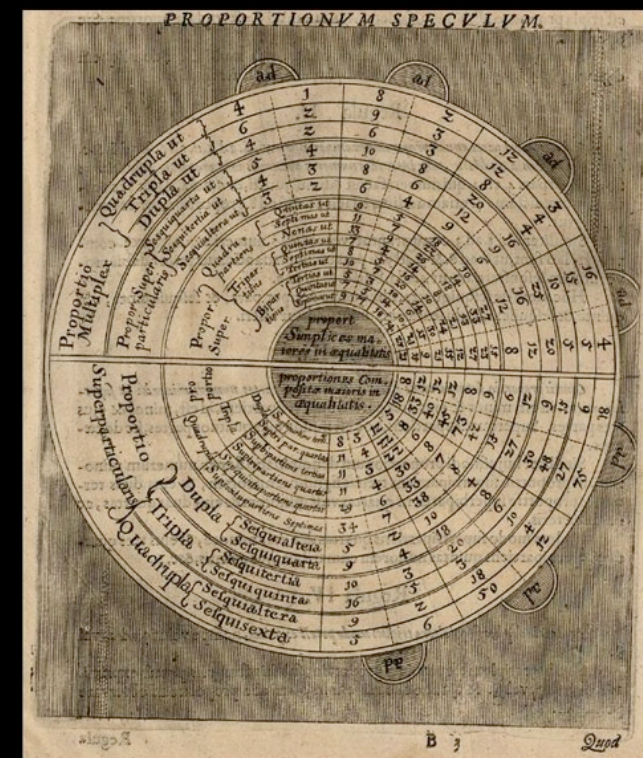
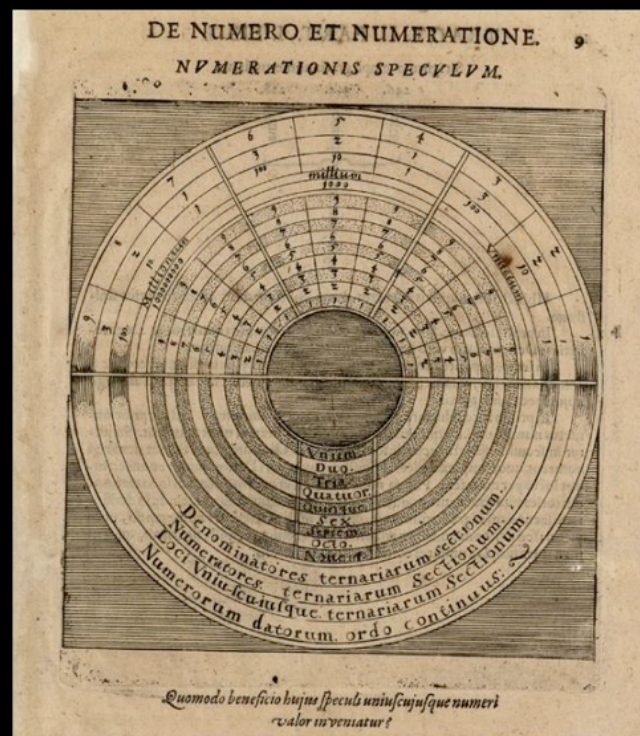
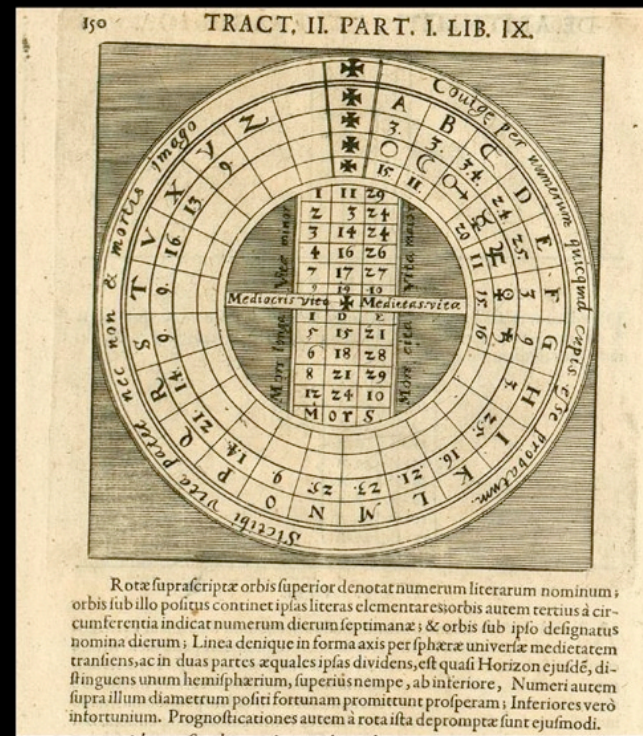
lists



tables



tables



tables



tables

	A	B	C	D	E
1	1	0	0	1	0
2	0	1	1	0	1
3	1	0	0	1	0
4	1	1	0	0	0
5	0	1	1	0	1

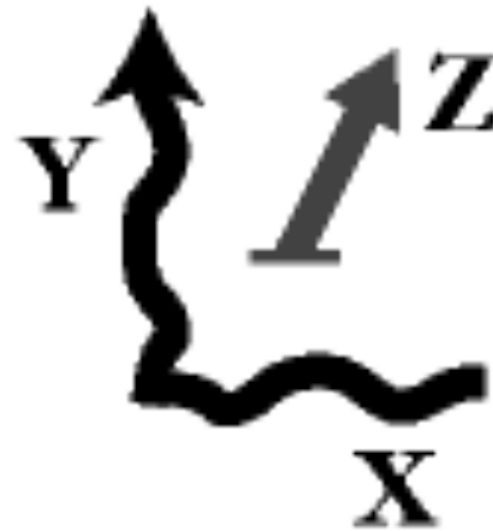
8

	A	B	C	D	E
1					
2					
3					
4					
5					

9

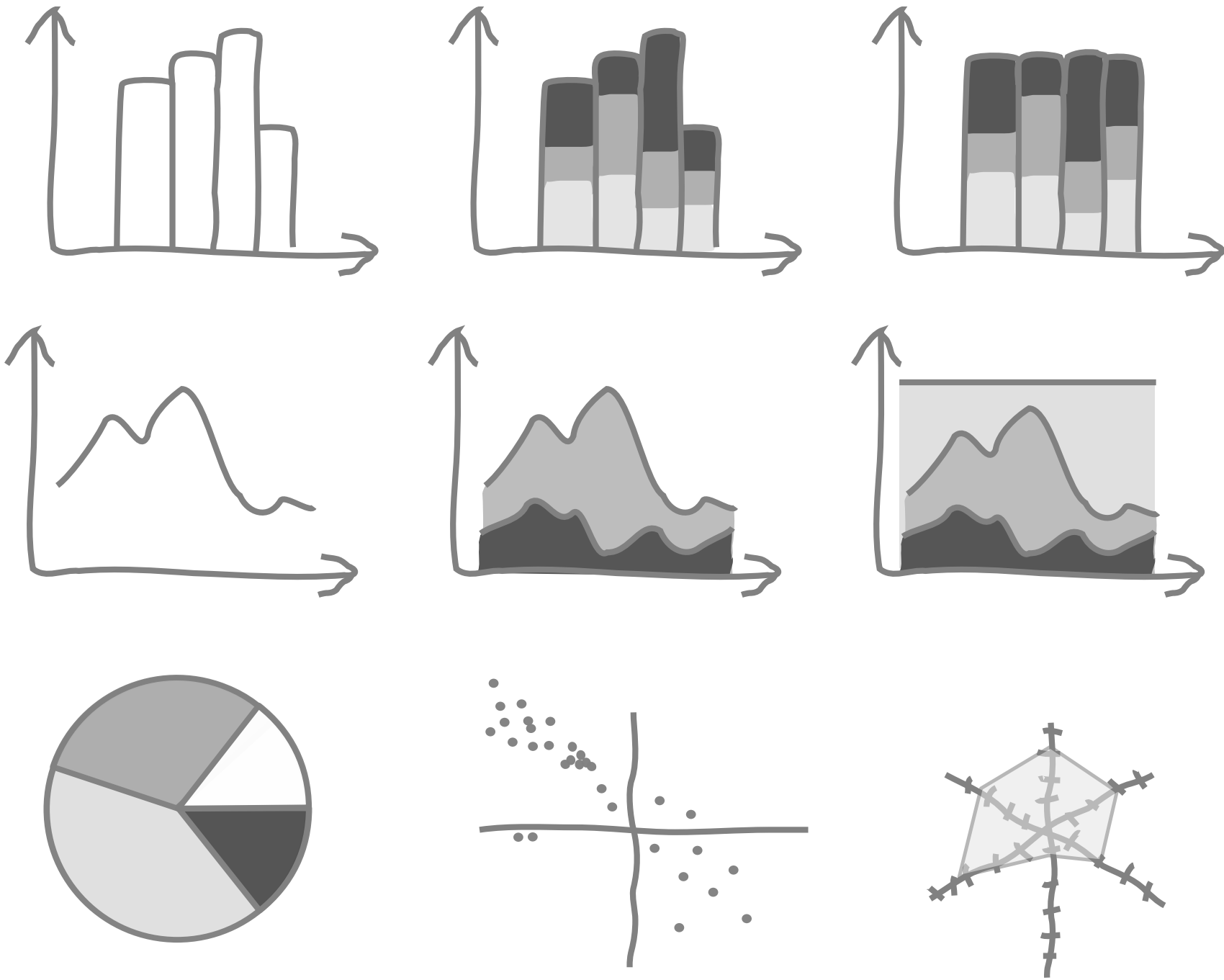
	D	A	B	C	E
1					
3					
4					
5					
2					

10

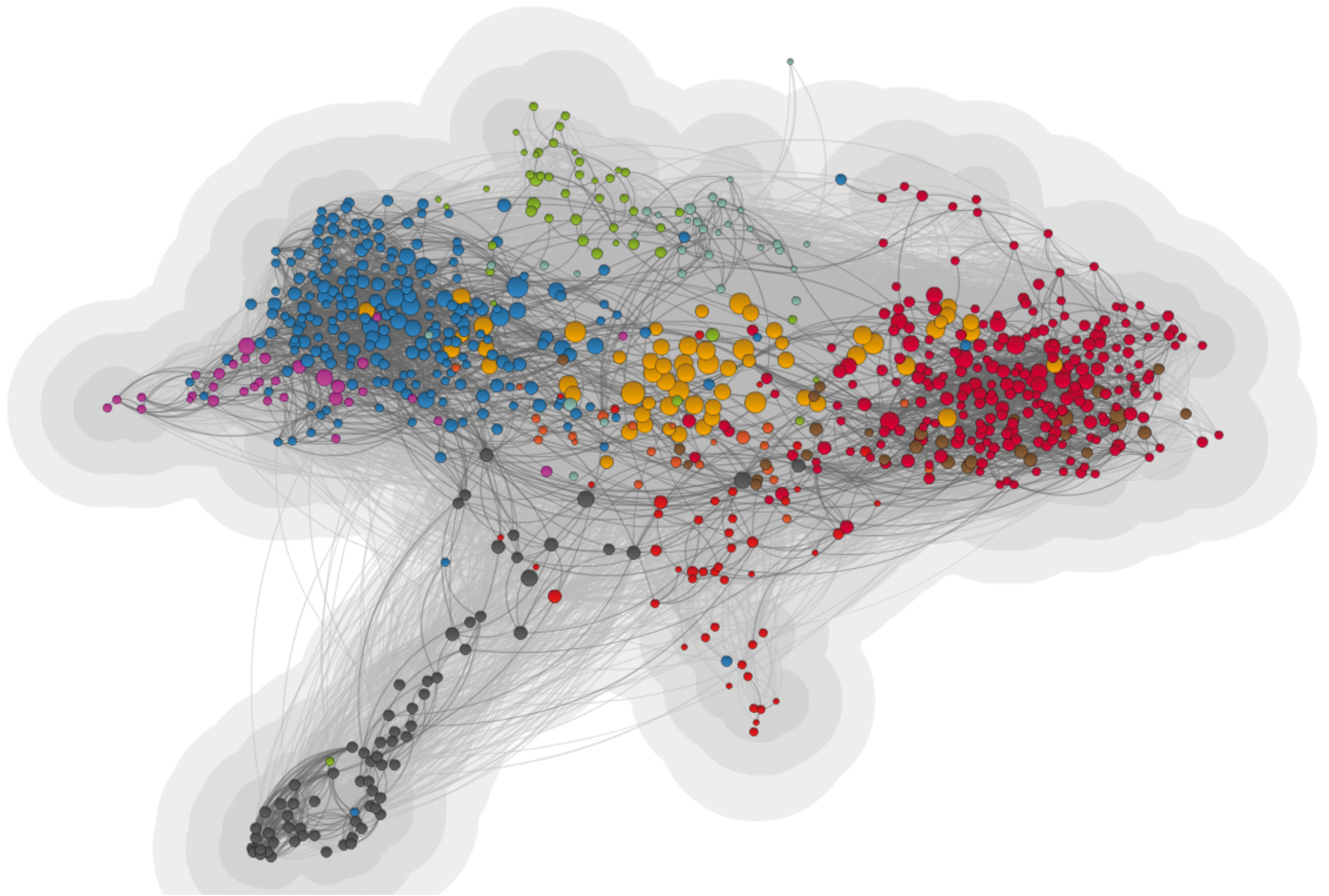


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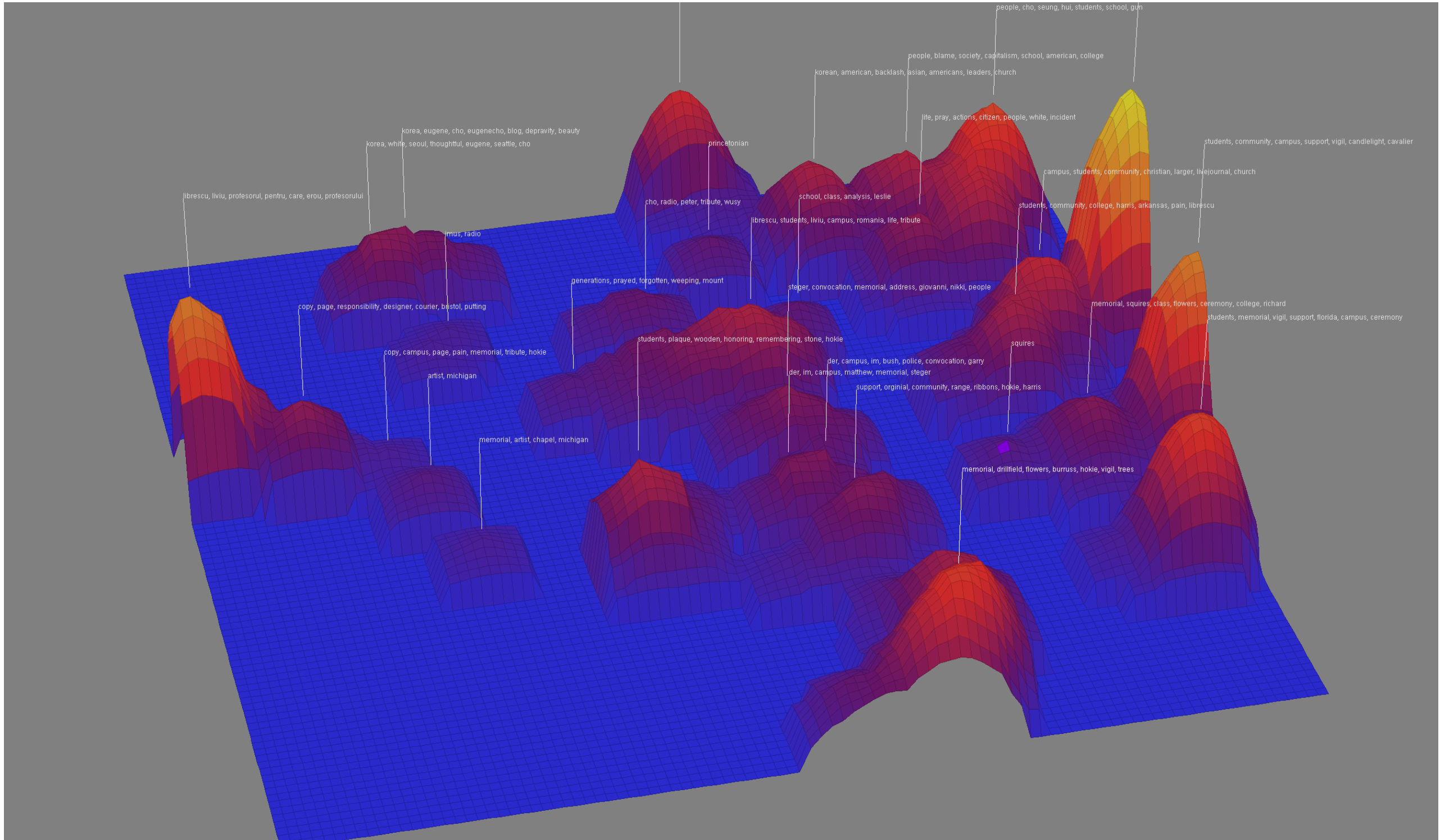
tables



diagrams



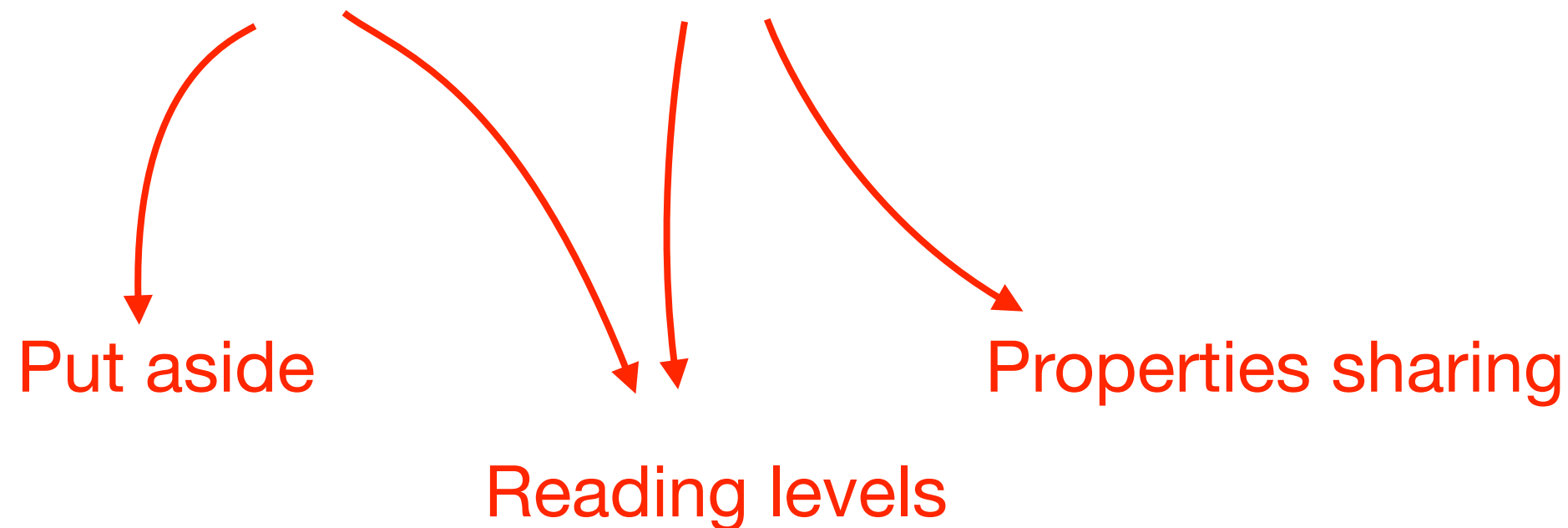
Graph visualisation



map

Secondary structures:

Addition and Fusion of primary structures



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- Cardon Dominique, « Le design de la visibilité : un essai de typologie du web 2.0 », 1er Février 2008, en ligne, InternetActu, <http://www.internetactu.net/2008/02/01/le-design-de-la-visibilite-un-essai-de-typologie-du-web-20/>
- Chartron Ghislaine, « Une économie renouvelée de la publication scientifique », http://archivesic.ccsd.cnrs.fr/sic_00117798/fr/
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- Davidson Cathy N. and Goldberg David Theo, The Future of Learning Institutions in a Digital Age, MIT Press, Juin 2009, 81 pp. En ligne : <http://mitpress.mit.edu/9780262513593>
- Deschamps Christophe : « L'indispensable gestion de la réputation numérique », 6 février 2006. En ligne : <http://www.zdnet.fr/blogs/2006/02/06/lindispensable-gestion-de-la-reputation-numerique/>
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- Gallezot Gabriel, Le Deuff Olivier, « Chercheurs 2.0 », http://archivesic.ccsd.cnrs.fr/sic_00396278/fr/
- Helly Perrine, « Partager et valoriser l'information scientifique sur le web », Diaporama de formation en ligne, <http://www.slideshare.net/phelly/partager-et-valoriser-linformation-scientifique-sur-le-web-1184578>
- Helly Perrine, page delicious.com sur les réseaux sociaux de chercheurs http://delicious.com/Formadoct/r%C3%A9seaux_sociaux+chercheurs
- Jenkins Henry, Confessions of an aca/fan, blog personnel, <http://henryjenkins.org/>
- Voir notamment : « Why academics should blog », http://www.henryjenkins.org/2008/04/why_academics_should_blog.html, (traduction partielle accessible : http://affordance.typepad.com/mon_weblog/2008/04/les-universitai.html)
- et « From Youtube to Youniversities », http://www.henryjenkins.org/2007/02/from_youtube_to_youniversity.html
- JISC, « Higher Education in a Web 2.0 World », Mars 2009, en ligne : <http://www.jisc.ac.uk/publications/documents/heweb2.aspx>
- Leeder Kim, « Social networking with a brain: a critical review of academic sites », 10 Décembre 2008, en ligne : <http://intheibrarywiththeleadpipe.org/2008/social-networking-with-a-brain-a-critical-review-of-academic-sites/>
- Pène Sophie, « Les universités sont des réseaux sociaux », Février 2008, <http://blogs.univ-paris5.fr/pene/weblog/4139.html>

Le diaporama sera comme d'habitude mis en ligne sur Slideshare, dès qu'il sera

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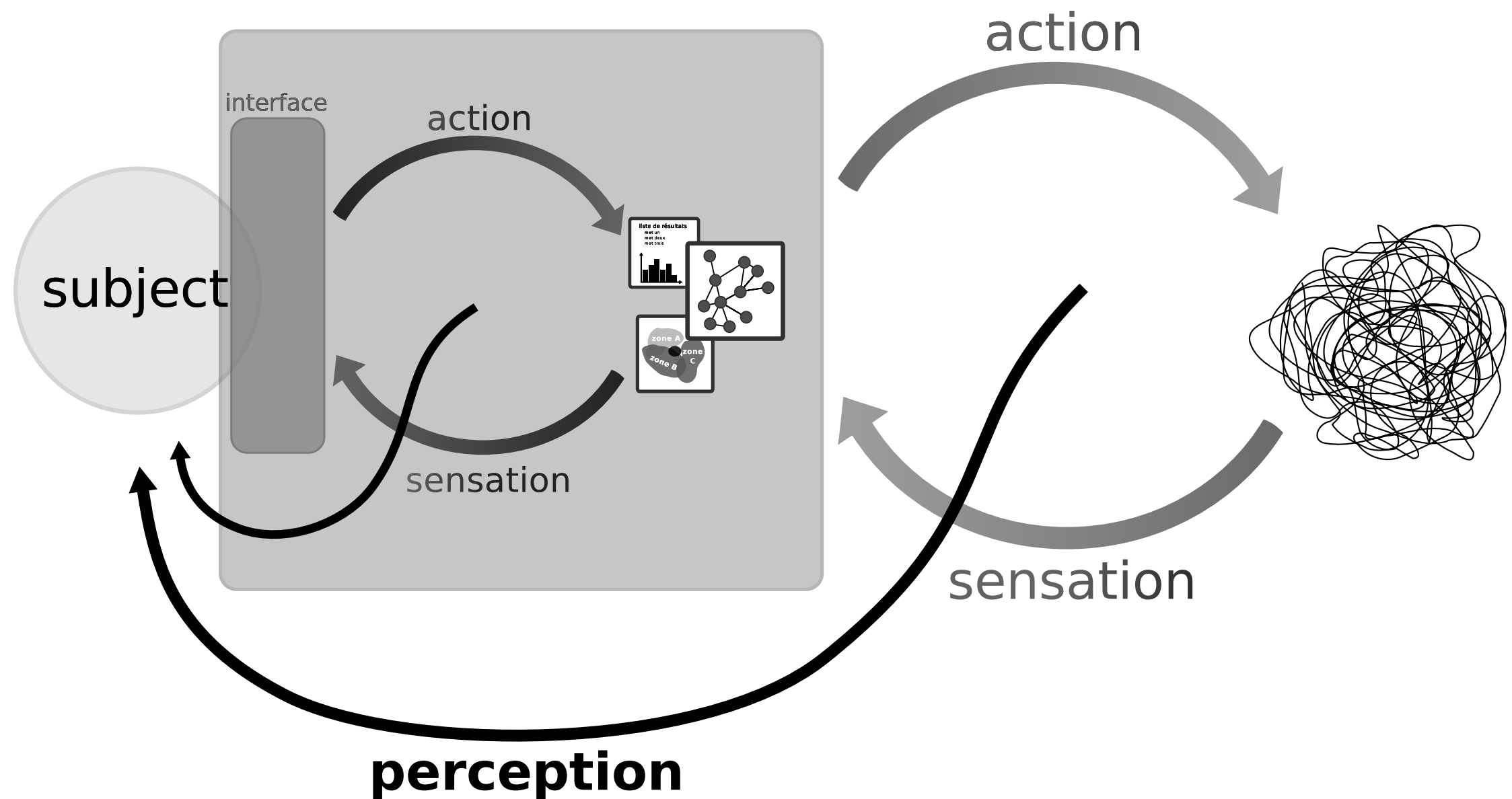
2 erreurs sont survenues lors de l'ouverture de la page. Pour plus d'informations, choisissez Fenêtre > Activité.

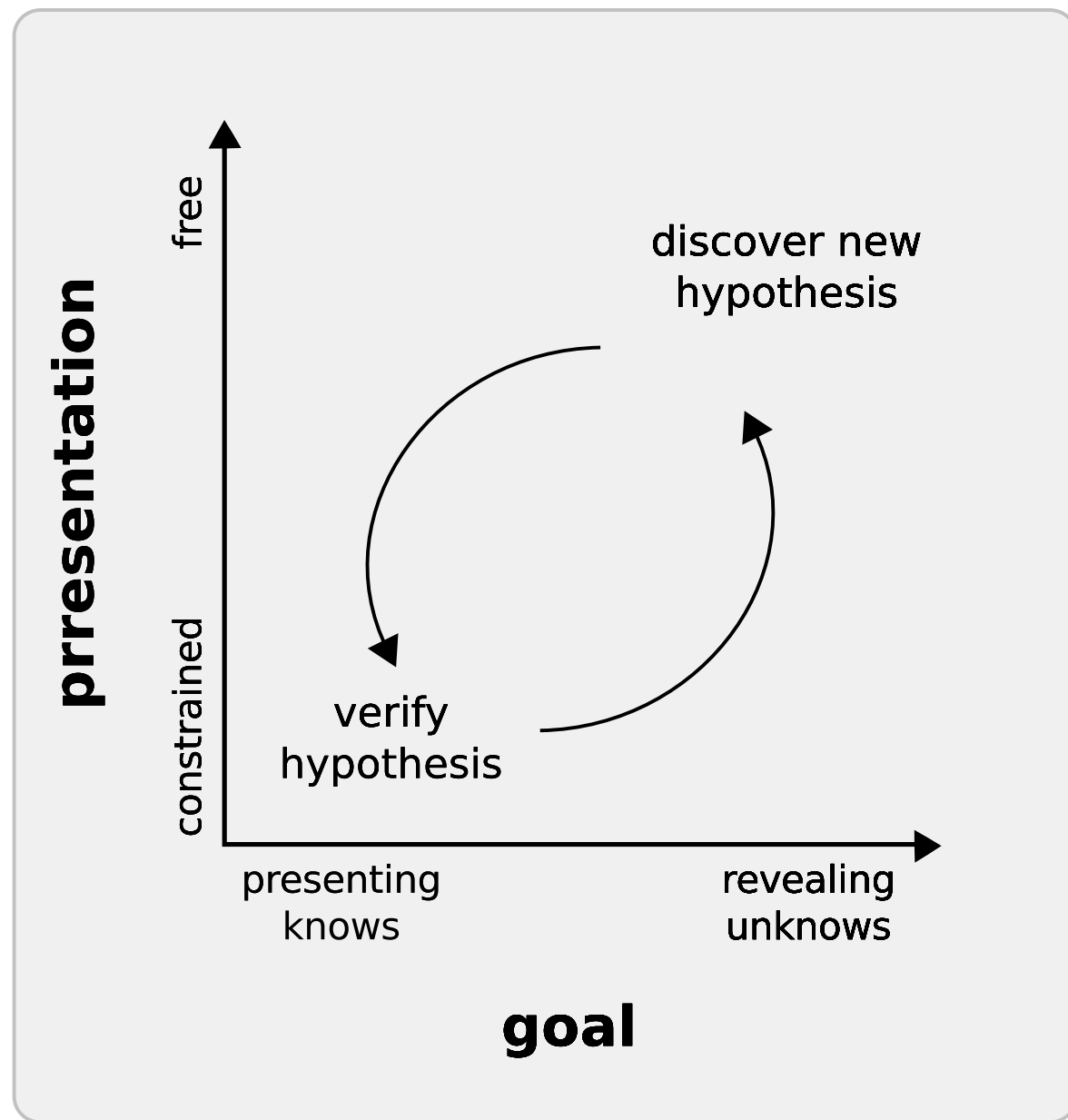
5 clients sont arrivés lors de l'ouverture de la boutique. Voici les informations qu'ils ont fournies :

re qisbolwag seig coawwe qmepinqe wig eu jidwe znx zjigegwag' qeg dñj seig

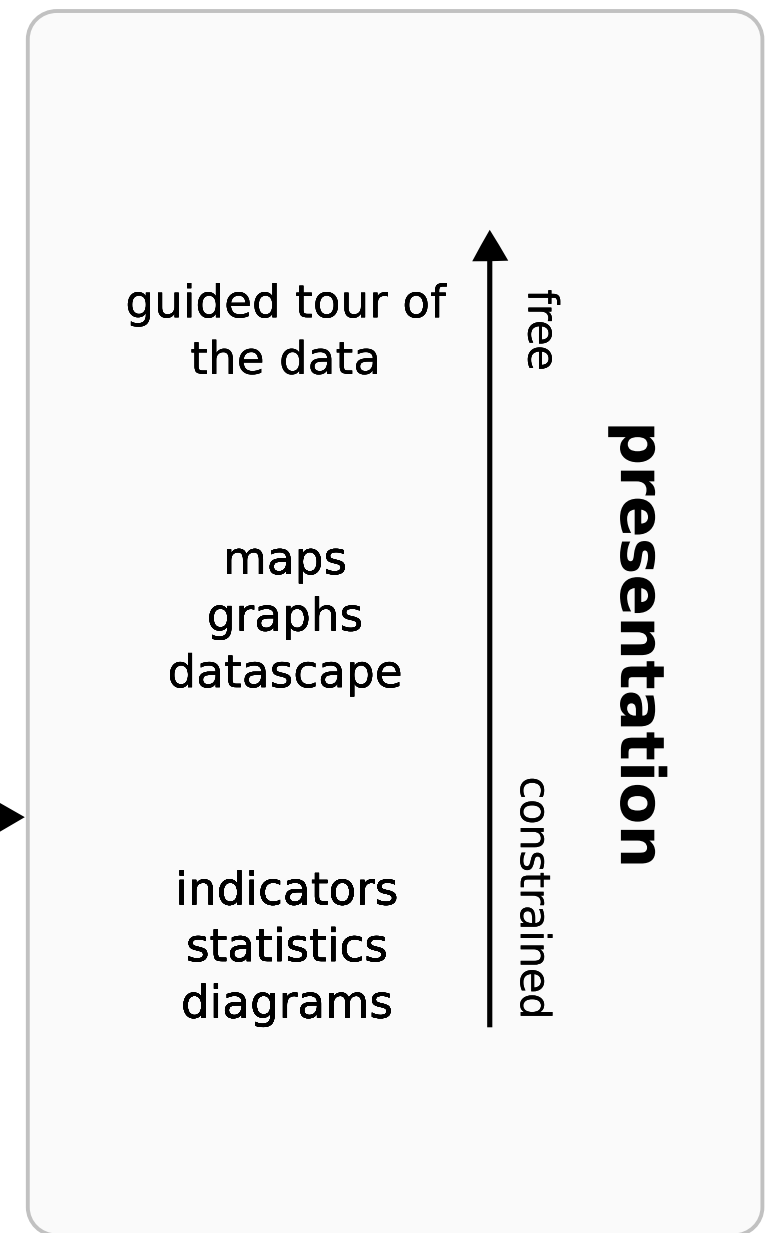
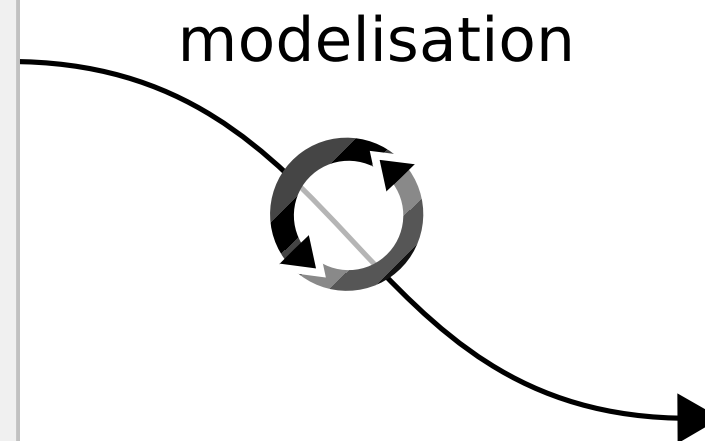


Semiology to act on complex systems and feel them





private realm
reflexion



public realm
communication

