VeLA: A Visual eLearning Analytics tool

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Outline

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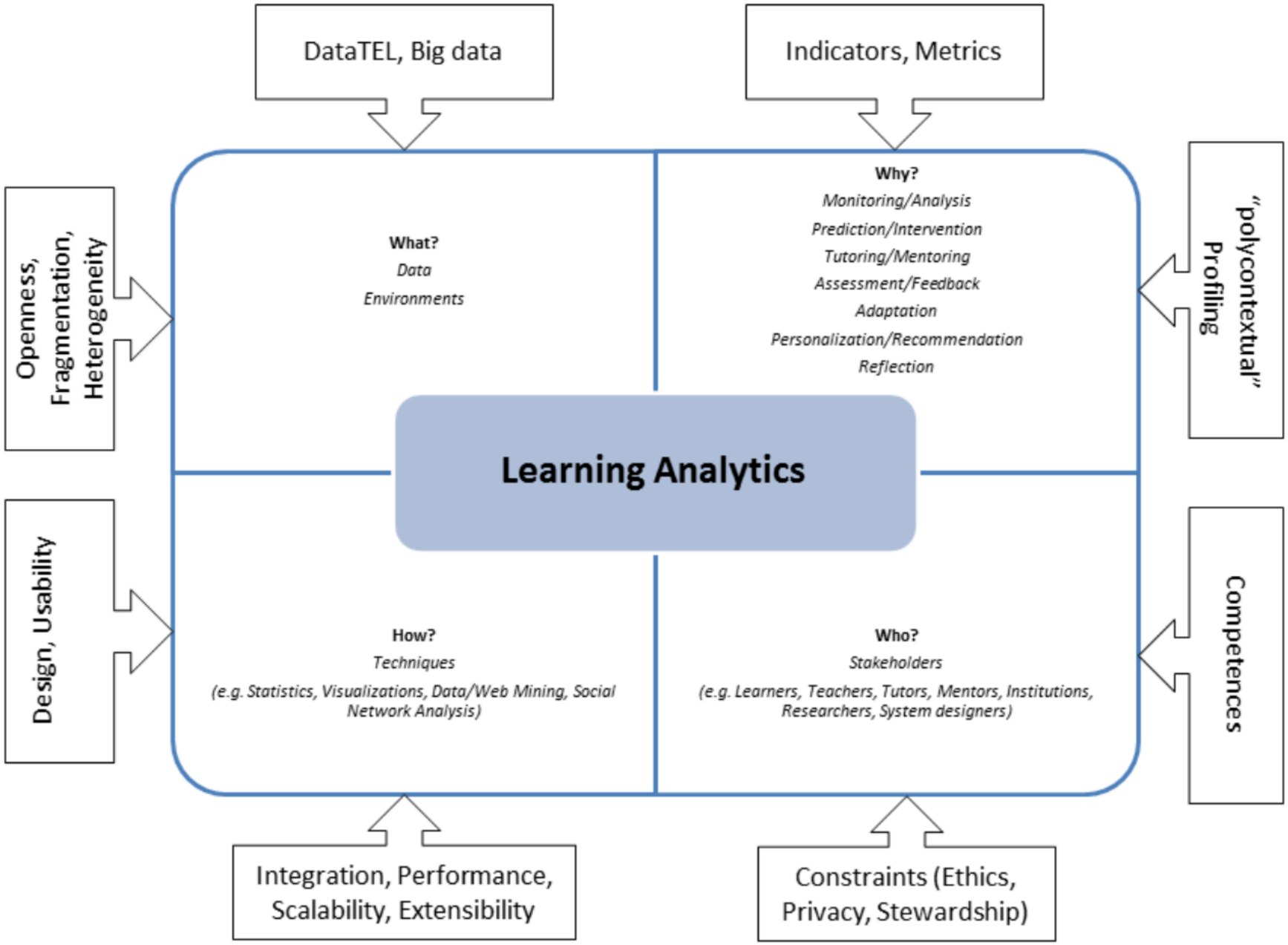
1. Introduction

GRIAL

Reference Model



(Chatti et al., 2012)

Visual Analytics: two definitions

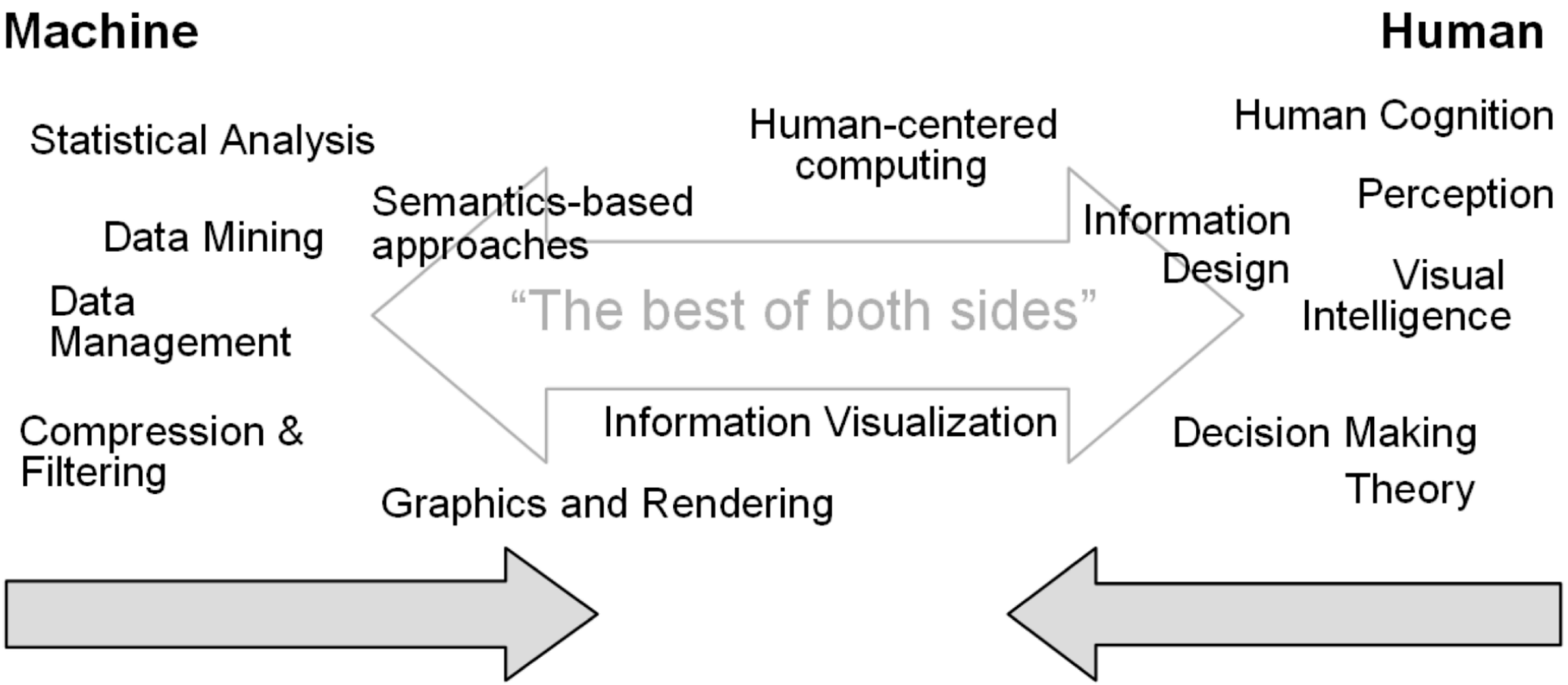
Visual analytics is the science of analytical reasoning facilitated by interactive visual interfaces.

(Thomas & Cook, 2005)

Visual analytics combines automated analysis techniques with interactive Visualizations for an effective understanding, reasoning and decision making on the basis of a very large and complex datasets.

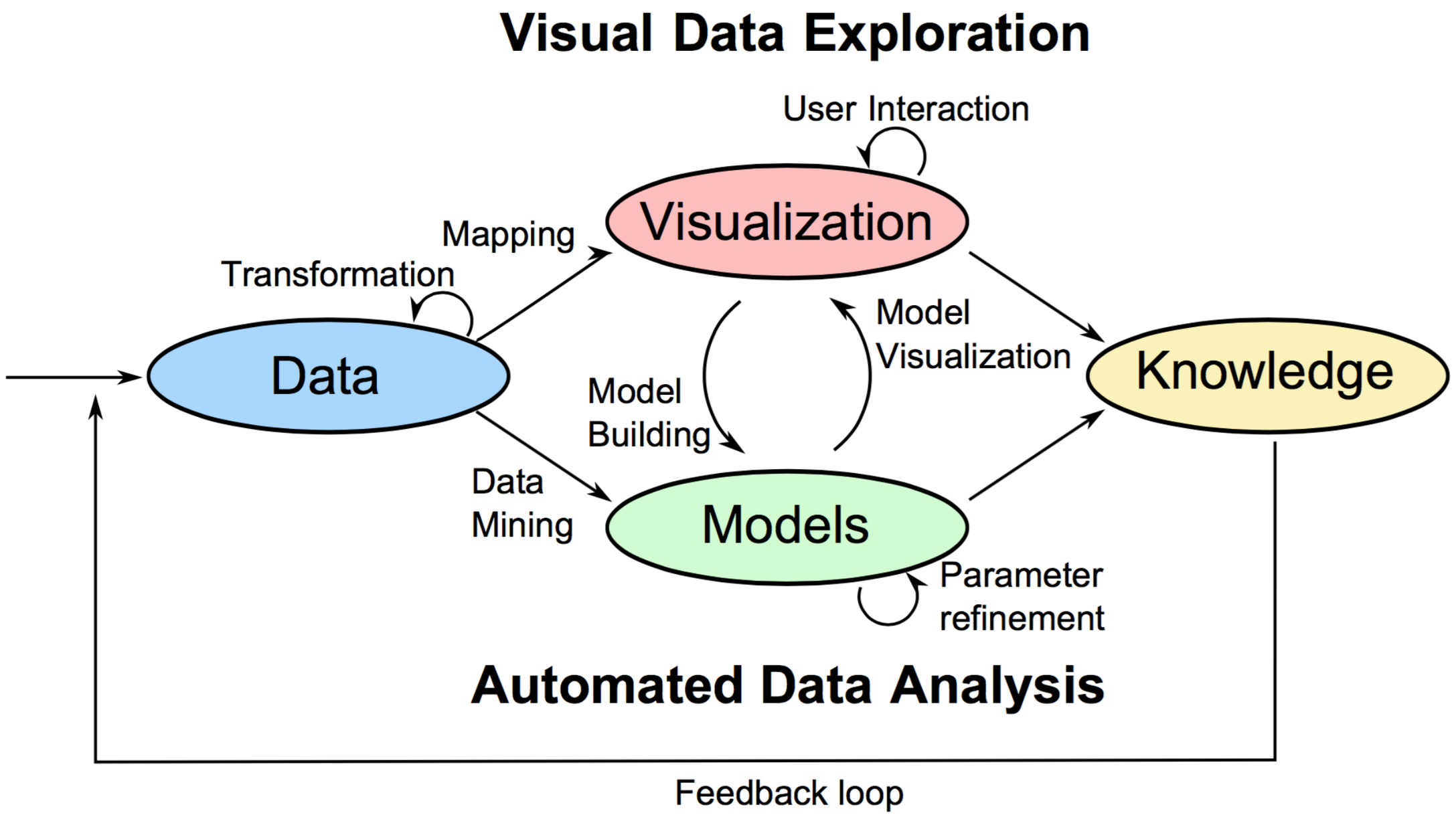
(Keim et al., 2010)

Visual Analytics



(Keim et al., 2008; 2010)

Visual Analytics Process



(Keim et al., 2008)

Visual Analytics Mantra

Analyse First

-

Show the Important

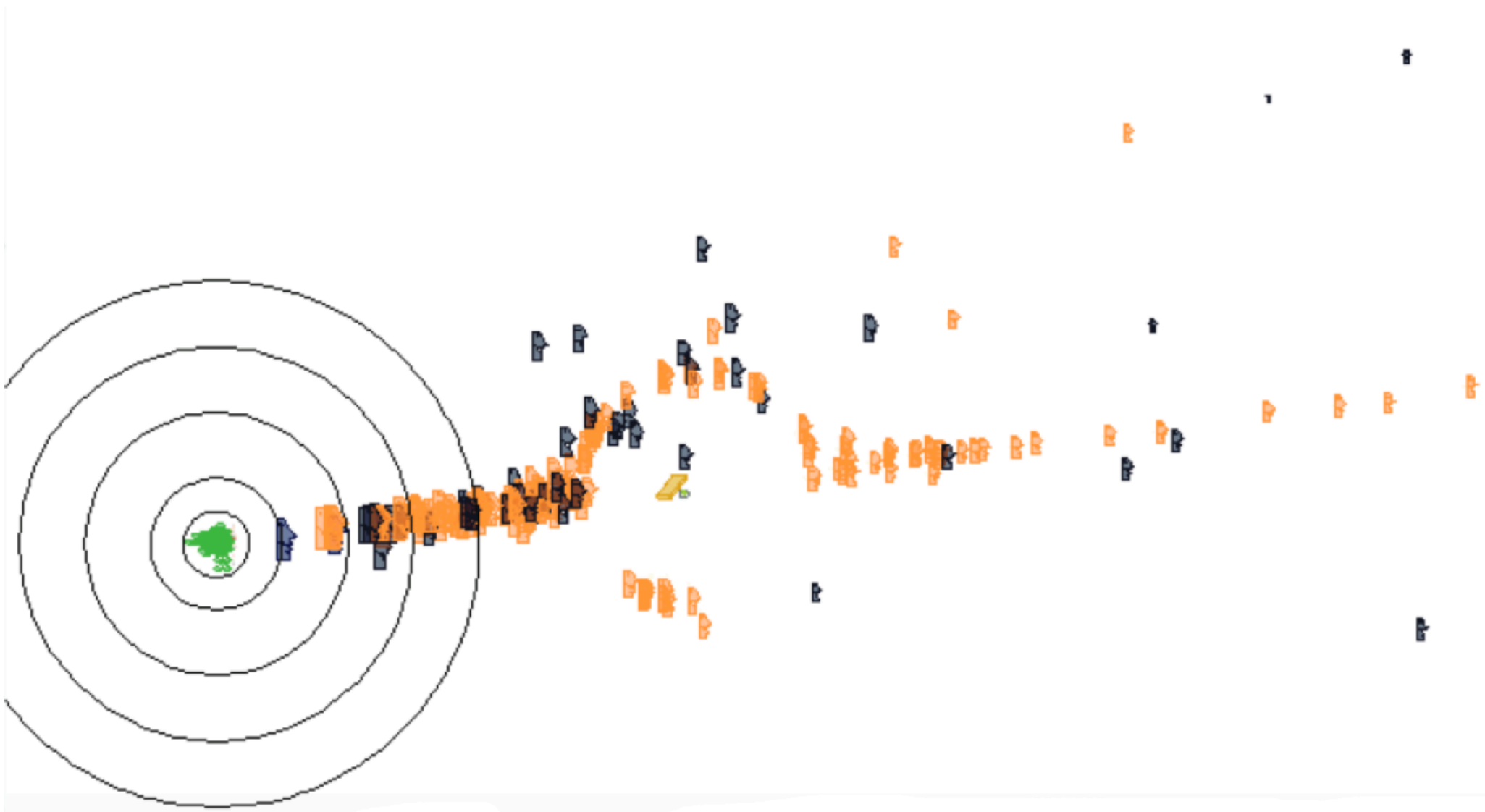
-

Zoom, Filter and Analyse Further

-

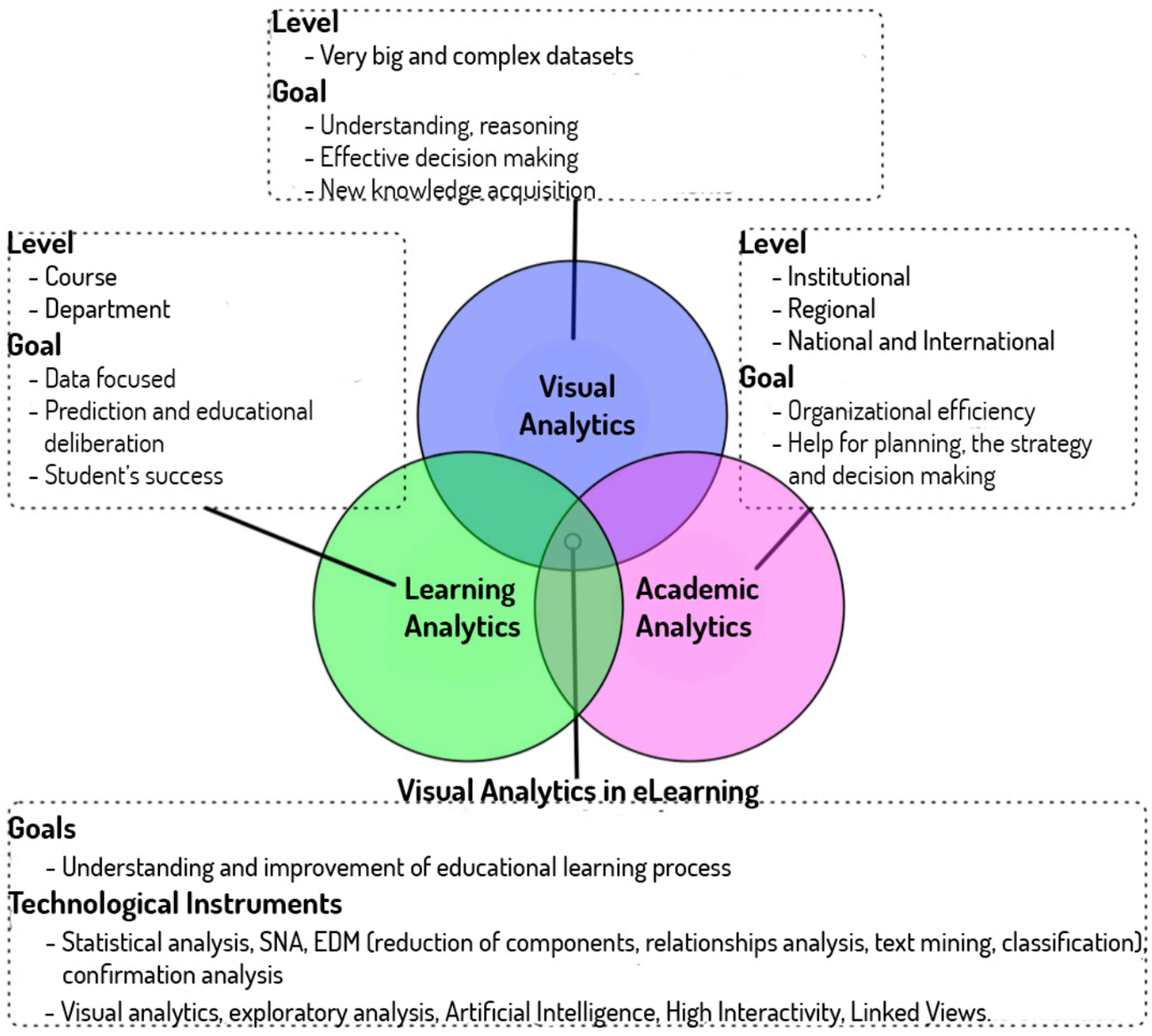
Details on Demand

(Keim et al., 2008)



4. VeLA foundations

Visual eLearning Analytics (VeLA)



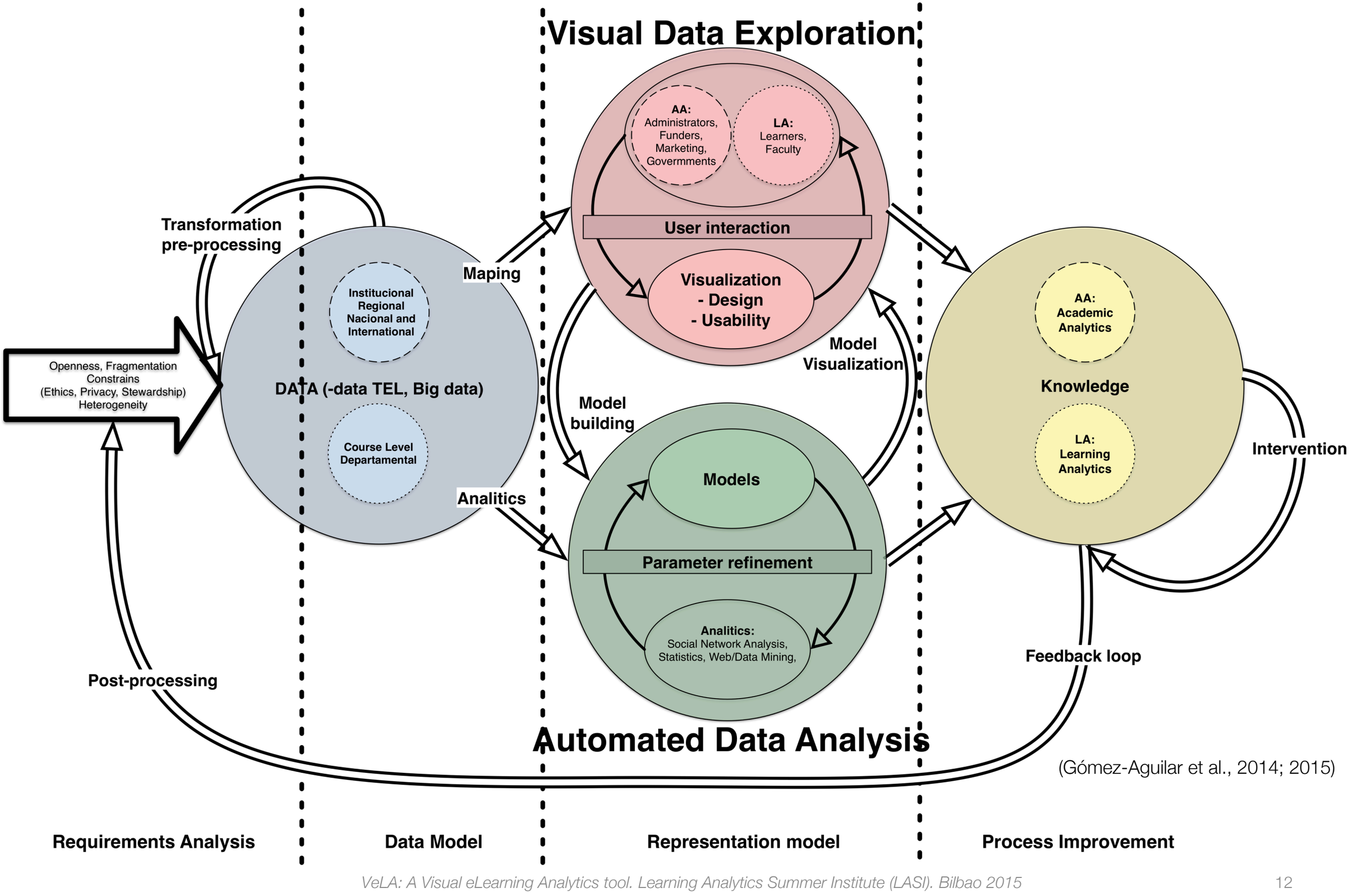
Adapted from (Gómez-Aguilar et al., 2014; 2015)

VeLA Model: The goal

To define a model able to scaffold the visual analysis required steps of the information generated in teaching and learning processes, taking into account the latest designs and methodologies in the process of academic analytics, learning analytics, visual analytics and InfoVis

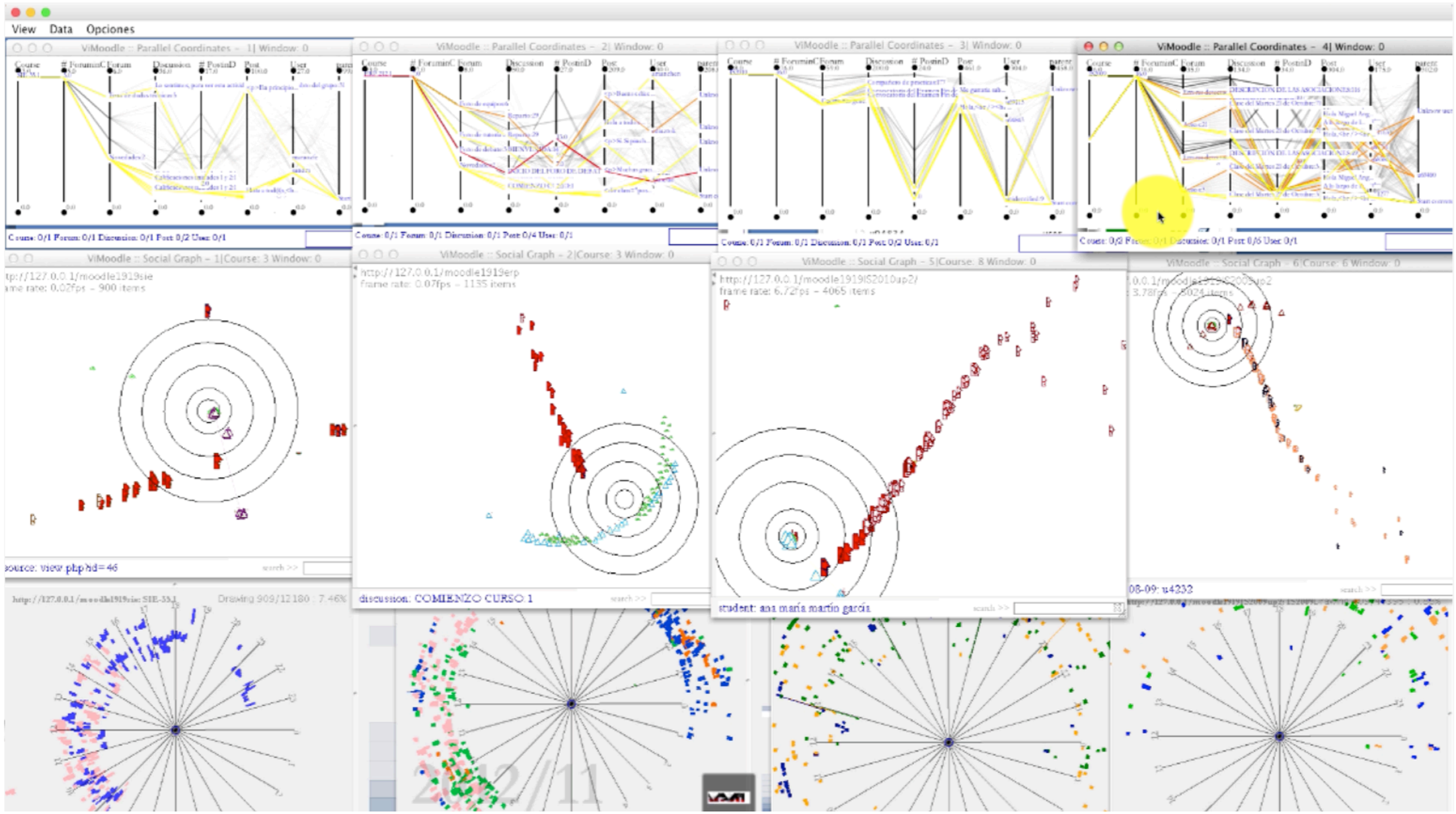
(Gómez-Aguilar et al., 2014; 2015)

Visual eLearning Analytics process



(Gómez-Aguilar et al., 2014; 2015)

Visual eLearning Analytics (VeLA)



https://www.youtube.com/watch?v=PZ7w_6EzMpI

Digital-eye by onix15
http://www.deviantart.com/

5. Conclusions

Conclusions

- Data visualization and visual analytics tools empowers users to understand and manage complex datasets, even if they have not (too much) previous experience using this kind of systems.

- Nowadays researchers have access to many analytics tools and visualizati on tools. It is responsibility of them to distinguish what of them are the mos t suitable for solving their research problems.

- The systems for Learning Analytics and Visual Analytics should not be considered only as tools, but like complete systems backed by formal mod els.

- VeLA demonstrates the enormous potential of the Visual Analytics applied to Learning Analytics, and leaves open a promising line of research

Books by vladstudio
http://www.deviantart.com/

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