Variant graph

A variant graph is a means of representing the variation in a text via a directed acyclic graph. Each such graph has a beginning node and an ending node; each textual witness is represented through a single path through the graph from beginning to end, taking in along the way the sequence of readings that make up that text.

The variant graph was pioneered by Schmidt/Colomb (2009), who proposed a model in which both the text versions and the witness labels are put on the graph edges, while the nodes represent waypoints within the text where divergence begins or ends. An example of this style of variant graph is given in Fig. 1; the graph represents three witnesses A, B, and C, whose texts read respectively:

A – Questa è l'ultima traccia d'un antico acquedotto di sguardi, una orbita assorta e magica:
B – Questa è l'ultima cenno d'un antico acquedotto di sguardi, la sua curva sacra e muta:
C – Questa è l'ultima porta d'un antico acquedotto di sguardi, la sua curva sacra e solitaria:

Illustration

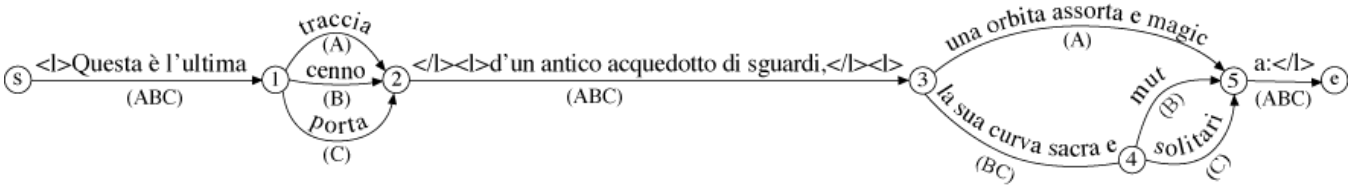

Fig. 1. An example of a variant graph, from Schmidt 2009.

The version of the variant graph now most commonly in use (e.g. in the CollateX and StemmaWeb tools) instead displays the text readings themselves on the nodes of the graph, while the edges carry labels only for the witnesses, as they take a particular path between the nodes to string together their readings. An example of this graph is given in Fig. 2; the graph represents seven witnesses which read thus:

Va6: Apostolus insignes quae pertineant ad deum
Vb11: Apostolus insignes quae ad deum pertinent
Vb12: Apostolus insignis quae pertineant ad deum
Vb18: Apostolus insignes in his qui pertinent ad deum
Vb20: Apostolus insignes quae pertineant ad eos
Vb21: Apostolus insignes in his quae pertinent ad deum
Vb9: Apostolus insignes quae pertineant ad christum

Illustration

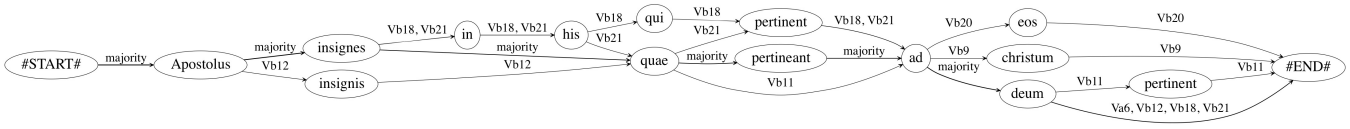

Fig. 2. An example of a variant graph produced by the StemmaWeb tool (the data is from a sermon by St Augustine quoted in Shari/Partoens 2012, the graph also in Andrews/Macé 2013)

In some cases (e.g. in Stemmaweb) variant graphs may be annotated with links between readings that describe their relationship to each other; in order to preserve the directed and acyclic properties of the rest of the graph, these annotation links must be stored and analysed separately. An example is given in Fig. 3, where the transposition of 'pertinent' is noted with a red link, the near-synonym 'christum' and 'deum' is shown with a green link, and the grammatical relationship between the readings *insignes/insigis, qui/quae,* and *pertinent/pertineant* are shown with blue links.

Illustration

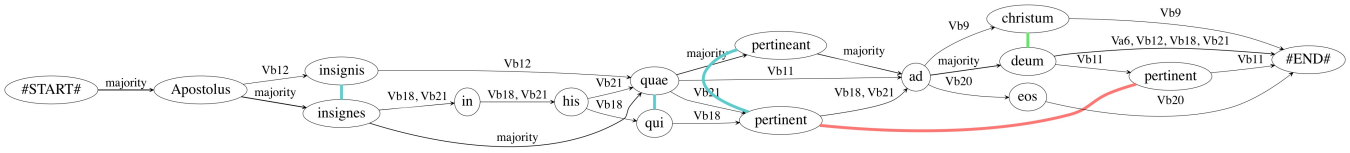

Fig. 3. An example of an annotated variant graph (same provenance as fig. 2).

References

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In other languages

DE: Variantengraph
FR: graphe des variantes
IT: grafo delle varianti / grafico variante (the latter is rarely used)

TA

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