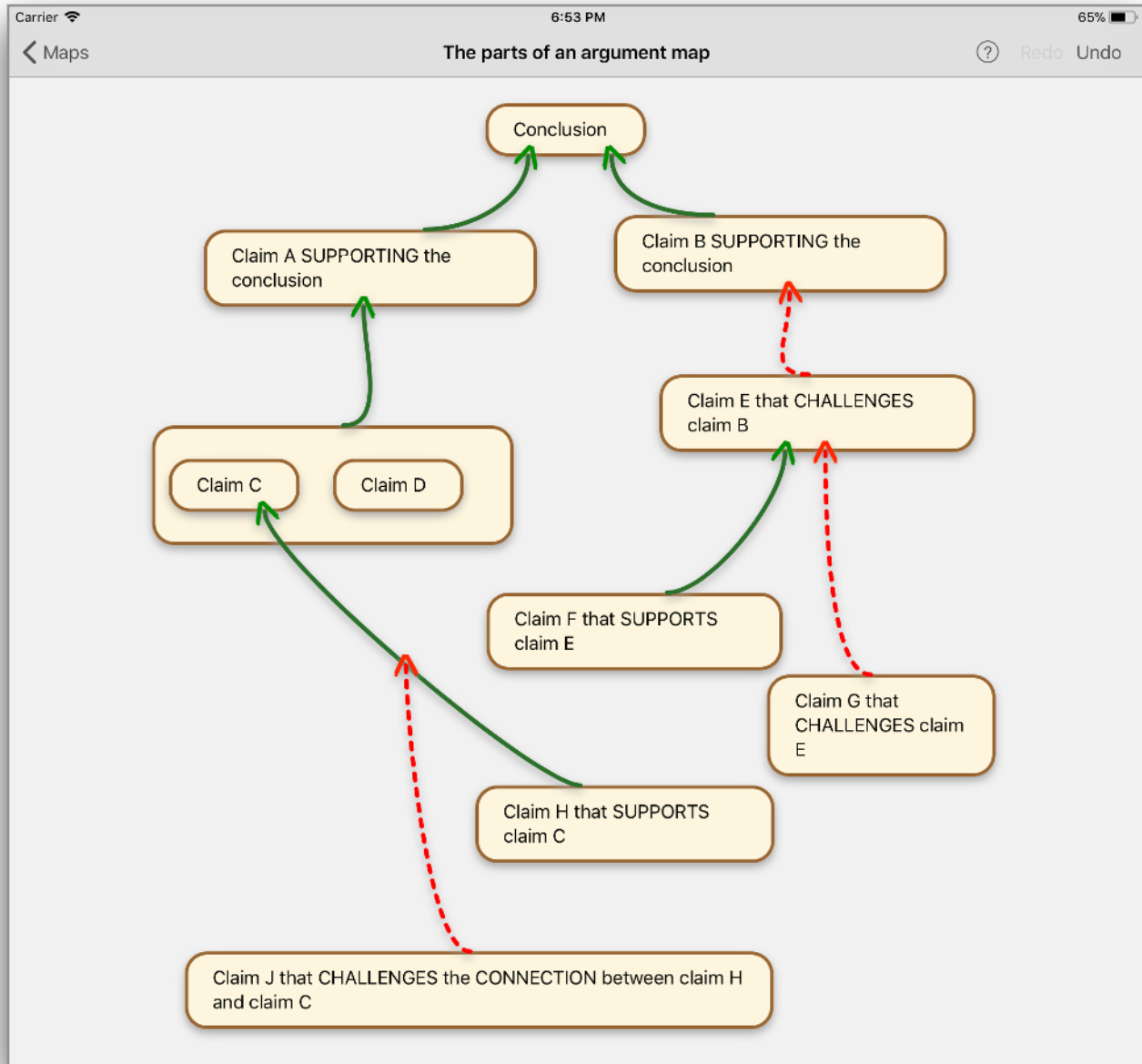# Argument maps
as a tool to aid critical thinking

If you ever have had to stop and ask for directions to a particular location, you may be familiar with the stress of trying mentally to retain a list of geographical directions, verbally conveyed. You may also have been fortunate enough to feel the relief when the direction-giver, seeing the perplexity on your face, also draws for you a map, highlighting your current location and showing the exact route for you to take. The map makes the verbal directions that much easier to process.

My Introduction to Philosophy students frequently have a similar "aha!" moment when they take passages of philosophical text and use them to construct *argument maps*. Argument maps are graphical visualizations of the relations among the various parts of arguments. Not only does argument mapping help students to understand others' arguments; throughout the course, the students use argument mapping to construct stronger arguments of their own.

While many students choose to construct their maps by hand, I provide several computer software options to facilitate map construction. These include, among others, Dr. Don Bindner's argument-mapping website, found at http://sand.truman.edu/~dbindner/diagram/views/. I am also excited to offer to my students an app I have developed for iPad and iPhone, "MaptlyArgued" (now in

beta testing), which allows students to construct maps on their mobile devices.

Here is a screenshot of the app, showing the general parts of an argument map:

Conclusion

Claim A SUPPORTING the conclusion

Claim B SUPPORTING the conclusion

Claim E that CHALLENGES claim B

Claim C   Claim D

Claim F that SUPPORTS claim E

Claim G that CHALLENGES claim E

Claim H that SUPPORTS claim C

Claim J that CHALLENGES the CONNECTION between claim H and claim C

In addition to having students individually construct argument maps, I have

introduced an in-class activity that I call an argument "map-a-thon," which is, in

essence, an argument jigsaw puzzle. In a mapathon, small groups of students lay

out pieces of paper and colored string to create maps of a line of reasoning

presented in some textual passage. Each claim associated with the reasoning is

written on its own sheet of paper, and different colors of string indicate whether

parts of the argument structure either support (green) or challenge (red) other

parts. During the exercise, I give students an unordered set of these claims, and I

circulate around the class and offer tips to students as they attempt to arrange the

papers in the proper way to construct an argument. An image of part of such an

argument map is included below.
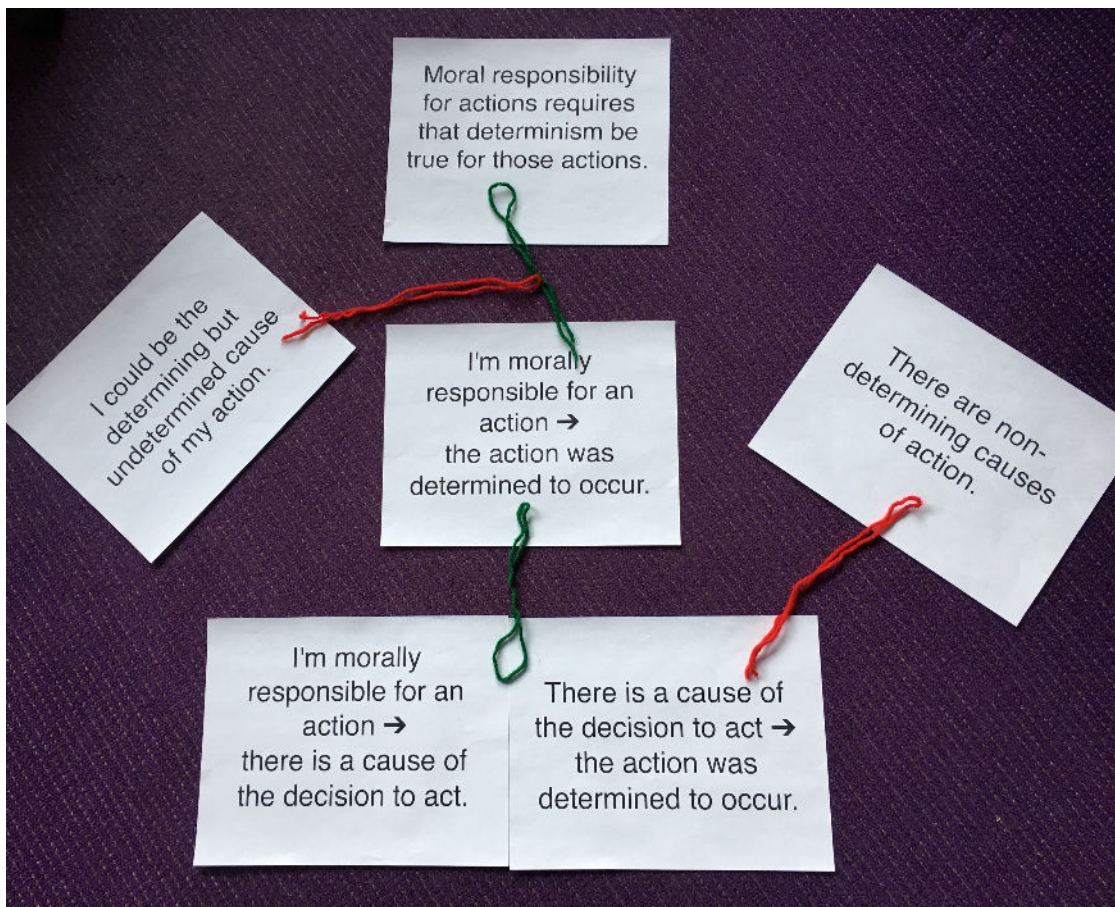
Recent empirical studies suggest that use of argument maps in university courses can have a significant positive effect on students' ability to comprehend and assess varied lines of reasoning.[1] I am excited to offer my Introduction to Philosophy students this opportunity to improve their critical thinking. I have begun to see the fruits of their argument-mapping efforts in the form of higher-quality philosophy papers in the course.

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[1] See a recent overview of such studies, for computer-aided argument mapping, in Davies, Martin. "Computer-Aided Argument Mapping and the Teaching of Critical Thinking: Part II." <u>Inquiry: Critical Thinking Across Disciplines</u> 27.3 (2012): 16-28.