

The Contagious Effect of Dialogism with New Technologies

Benzi Slakmon, Baruch B. Schwarz, The Hebrew University of Jerusalem,
School of Education, Mount Scopus, Jerusalem, 91905, Israel
Email: benzion.slakmon@mail.huji.ac.il, baruch.schwarz@mail.huji.ac.il

Abstract: Most of the CSCL tools have been studied in short term interactions. Argunaut encapsulates many layers of ideas about dialogue and bears potential for dialogic education. In this paper, the intermittent use of Argunaut over a yearlong philosophy course is described. We focus on the trajectories of participation of two students. Two discursive phenomena are discussed: the transformation of a student, as a consequence of participation in a different group discussion, into a carrier of discursive norms previously unknown to its original peers; and the move into a multi-registered, double-voiced performance by another student. The role of the peers in these transformations is elaborated. The role of the tool Argunaut which was designed to support dialogic argumentation is also considered.

Introduction

The study of *trajectories of participation* (Ludvigsen et al., 2011) can help in understanding the interdependencies between historical and specific situations. One of the domains in which CSCL tools is by now the most popular is the domain of *dialogic teaching* (Alexander, 2004). In this paper, we analyze specific trajectories of participation in a program intended to foster philosophical activity. We used the Argunaut system intermittently. The use of the system by groups yields artifacts – argumentative maps, which can be capitalized on by the teacher and the students in subsequent activities. The Argunaut system was developed to facilitate moderation of group e-discussions with the Digalo tool (Schwarz & Glassner, 2007), a tool for enhancing dialogical teaching through argumentative practices. Argunaut provides moderators with awareness indicators and alerts, a remote control intervention panel, and classifications of important dialogue features. These aids were envisioned to help moderators monitor, evaluate, and guide discussion without disrupting the flow of the ongoing collective argumentation (Schwarz & Asterhan, 2011). Figure 1 shows some of the most important functionalities of the Argunaut Moderator's Interface.

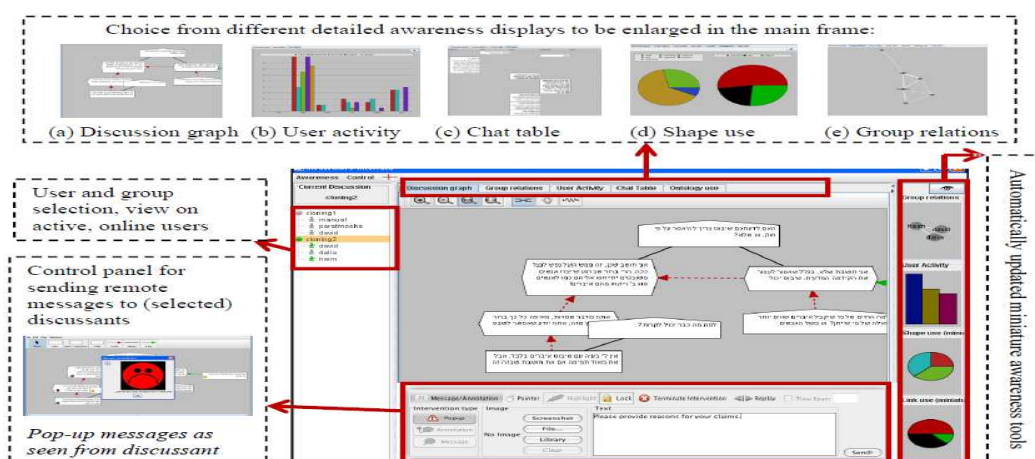


Figure 1. Argunaut's Moderator's Interface and its main features.

Most of the CSCL tools have been studied in short term interactions between users. However, Argunaut encapsulates the fact that dialogue is not only a tool for knowing but also an object to be reflected on. Like in the case of other CSCL tools, almost no study was done to describe trajectories of students in heterogeneous scales of time (for exceptions see: Ludvigsen et al., 2011). Without those descriptions, without observing the intersections of trajectories in elaborating meanings, tools and ideals miss their missions.

The philosophy course took place with 28 Grade 8 students. The school is a junior high-school whose policy is to integrate students with very different socio-economic levels. Thematically, the course was organized around three major ideas examined through its manifestations in three planes: (1) Justice, through the notion of 'inequality'; (2) Truth, through the notions of 'understanding' and 'interpretation'; (3) The Good, through the notion of the 'good conversation'. The course deployed throughout an entire year, six hours a week. The argunaut sessions were implemented as an integral part of the curriculum. Two personal trajectories are examined here: the trajectories of Yoel and Avi, who generally belonged to the same discussion group. The two

are followed over three consecutive sessions. It is worth mentioning that their activity took place simultaneously with other discussion groups in the classroom.

The Analysis of two trajectories of participation

First Argonaut session. Groups were asked to read an authentic philosophical story composed by a classmate, dealing with the dilemma of stealing food in difficult times. The assignment was to describe the "great question" (as opposed to non-philosophical ones), and try to deal with it. Although their discussion lasted 17 minutes, it ended up with only one formal contribution, as Yoel is saying: "I'm alone in the conversation". But actually this utterance is not the only one: all other contributions were erased by participants, thus leaving the space empty and clean. Table 1 brings the full transcript. The numbers indicate the order of operation; the left column shows the contributions; the right column shows the deletions.

Table 1: First session's transcript

1. Avi: yoellllll, ya stinkkkker!!	2. Avi: yoellllll, ya stinkkkker!!
3. Avi: yoell, ya stinkkkkkkkkkkkker!	4. yoell, ya stinkkkkkkkkkkkker!
5. Gabby: schnitzel [wrongly writes in English letters instead of Hebrew]	6. Gabby: schnitzel
7. Gabby: Nathan Sulem [a classmate's name] loves schnitzels	8. Gabby: Nathan Sulem loves schnitzels
9. Avi: Sandra [name of a classmate's mother]	10. Avi: Sandra
11. Avi: let's crash stinker Amos.. [a classmate]	
12. Gabby: c'mmon, letz [let's]	13. Gabby: c'mmon, letz
	14. Avi: let's crash stinker Amos..
15. Gabby: Sulemmmm	
16. Avi: is it right to steal for foodd?!	17. Gabby: Sulemmmm
18. Gabby: ye[,] what[,] didn't you see Sulem doing it	
19. Yoel: why not?	20. Gabby: ye what didn't you see Sulem doing it
21. Avi: let's do super [market] today...	22. Avi: let's do super today...
	23. Yoel: why not?
24. Yoel: I'm alone in the conversation	

Second Argonaut session. Avi and Gabby were absent, and Yoel joined to Agam, Lea, and Noa, who generally collaborated as a discussion group. The session dealt with the ethical issue of ends, means, and justifications. The session lasted for 34 minutes (twice longer than the first session), and contained 39 utterances. All 39 utterances were on-task (2 out of 13 in the first). Yoel was not active. The first ten minutes consisted of a dialogue solely between Lea and Agam. They were calling for his participation vigorously: "are you alive?" Yoel remained unresponsive. Four minutes later Agam asked: "Yoel, what do you think of the story?". At the same time Lea interjected: "Yoel???". After 15 minutes of idleness Yoel wrote his first contribution: "I haven't finished rading [reading]". After another seven minutes Lea asked "Yoel, what are you thinking?" Three minutes later, as the other discussant seemed to agree upon the philosophical problem, Lea called upon Yoel again. Agam also tried to stimulate him: "so, c'mon what are you waiting for the lesson is over in a second!!!!". Yoel replied: "I finished [,] just don't have what to write", but this was neither what Lea had in mind ("what do you think about the story??."), nor Agam ("so turn on your brain and start writing right now!!!!"). Yoel responded, making a mockery out of Agam's pressure ("here [,] I wrote"). Agam kept pushing him, demanding his words about the story ("verrrrrrry funny now writttte what you think of the storyyyy"). Only two minutes later, three minutes before the session ends, Yoel reacted: "in my opinion, he should help him". This was his final contribution.

Third Argonaut session. The session was dedicated to Singer's (2009) argument about poverty in the third world and the imperative for redistribution of global (and personal) wealth as a just consequence of it. Singer equals avoiding from active redistribution to murder. Avi, Gabby, and Yoel were teamed together again as a regular group. The session lasted for 24 minutes (13 in the first). Here is their discussion:

1. Avi: yoel, ya [you] stinker
2. Gabby: hjgl [??]
3. Avi: what's to do?
4. Yoel: need to talk about what Benzi wrote
5. Yoel: it's not fair that there are people who need to pay for other people but you can't let them starve.
6. Avi: eef [if] I didn't have money for food I would steal...
7. Yoel: but it is not considered murder
8. Avi: look left -----→ you stupid (,) it's right
9. Avi: right, it is not considered murder...
10. Yoel: is it right to steal eef [if] you don't have money for food?
11. Gabby: I also don't think it is considered murder (,) I think it is one's own right to decide what to do with his money
12. Avi: yeahhhhh... ..
13. Yoel: right
14. Avi: in sum (,) you can steal for food but only for food!

Just like in the first session, Avi started by attacking Yoel (1), but this time, Yoel is *placing a blank claim form on the conversational space and from it sends an arrow signaling critique towards Avi's accusation*. Avi deletes his utterance, and so does Yoel. Then Avi asks for instruction (3), and it is given by Yoel (4), who's also starts referring to Singer's argument (5). Avi is replying, but from reading his contribution one can only suggest he is referring to the first discussion's subject. Yoel does not seem to be aware of that as he keeps with his thinking (7). Avi is contributing a comic writing based joke, *gets no response* and keeps contributing by returning to things at stake as he agrees with Yoel former contribution. Avi, unaware of the fact there was another topic besides what he figured out to be the one, summarizes with a stark moral rule: not only he uses exclamation mark, he also enlarges the contribution form on the virtual space to an extent much bigger than other contributions. Session ends.

Discussion

Yoel was forced to move into Agam's group. Because of his different participation norms, he was exposed to pressure to participate and contribute to the joint effort of his peers. Agam's discussion demonstrated values such as serenity and directedness which were unfamiliar to him. All other peers were capable discussants; they could abandon Yoel in his passiveness, but they demanded his participation and constantly confronted him with his silence; moreover, they held him accountable for the genuine performance of the entire group. As much as their attitude failed to bear immediate fruits, indeed it changed Yoel's personal trajectory, and consequently, his group trajectory as well. As he reunited with his former group, he carried with him the directedness of responsibility for the other. As opposed to the first session, Avi harassment directed at him was not answered with silence- or with personal counter attack, but with a demonstration of disagreement with such a behavior; he uses the form of critical arrow and points towards Avi's insulting contribution in the dialogic space until he removes it. Furthermore, he takes an active role, moderating it into an on-task discourse; *he gives instructions* and responding with continuity and generalizations, trying to develop the conversation.

One of the main differences between traditional lessons to the Argonaut discussion presented is the lack of teacher-moderation in the latter. Baker and his colleagues have already showed the rise in off-topic and social-talk contributions as students of poor argumentative participation habits use a CSCL environment (Baker et al. 2011). Same students maintained off-topic and social-talk during a whole subclass moderated debate, but as debates begun, none of the above categories lasted. We argue that looseness of performance in CSCL environment is a result of the fact there was no participant to voluntarily play the moderation role usually

enacted by the teacher. Some students did not identify this institutionalized voice in them, therefore did not voice it without external supervision. In Agam's discussion, the supervision was so internalized that the space was saved only to on-task contributions. This is the norm Yoel was exposed to. He witnessed how talk goes on without an institutionalized moderator and felt the group's pressure when he did not perform as expected. We see Yoel taking that role in the following discussion, acting out his recently-appropriated norm. The willing to accept the presence of the formal educational genre 'within' oneself, is a preliminary condition for entering the discussion, and this is where Yoel's importance *as discursive norms carrier* makes its central contribution, as he, an in-group member, worthy of trust, mediates the gap between genres with his way of existing in both worlds.

Avi's contributions are polarized, mostly off-topic, ad hominem and pidginized. Yet, once in a while, Avi moves into another register, uses a different function of the language and contributes on-task utterance. We argue that the Argonaut dialogic characteristics have a unique contribution to this kind of smooth movement across registers. Argonaut opened the space and afforded the tolerance towards Avi, thus contributed to the development of Avi's voice. The Argonaut system nurtures this kind of existence by doing three things: first, by eliminating the prosody of the utterances and by doing so, somewhat softens the immediate attribution of a contribution to a certain register; second, responses are always delayed, and are mediated through writing. There is a greater 'wait time' between the act of reading and the reaction of writing. The possibility of bursting at someone is mediated through the written, thus making the discursive behavior unnatural in a sense. One cannot use his old way of bursting, he needs to modify it. Third, the burden of immediate turn-taking is off: not only the response does not have to come immediately, but some utterances are not directed towards a specific addressee. Hence, participants respond intentionally after selecting what's worth replying and after formulating the appropriate response. Thus, although the utterance is ever present, it is detached from its creator, so the other participants can relate to it and can remain less obliged to the speaker. This detachment of the utterance from the speaker/writer *reduces the power of imposition* the speaker has on the other discussants, or if seen from the other side of the dialogue, it gives greater freedom to the addressees. The interesting finding here is that the described relatively detachment between the speaker/writer to the utterance has a liberating effect on certain students general contribution; they are not obliged to speak from a fixed position, they can afford themselves to be incoherent, i.e., to get involved in the on-task conversation at the same time they are keeping their old ways of talking in the conversational space.

Avi is broadening his range of contributions, becoming more engaged with task-focused activity, and *while doing so, keeps sending off-task contributions*. How does it happen? Avi addresses an insulting utterance but the pattern changes: Yoel's ignorance-that is made possible through the fact that he is remote and not having to respond immediately- serves as an opportunity for Avi to broaden his voice and try different register. All of Avi's utterances are response-oriented. Because of that, the importance of the delayed-response is crucial. Avi is capturing himself in his own prison of one-dimensional voicing, a voice of insult and harassment, especially as we place it in the context of his dialogicity, that is, his reliance on the other for the sake of getting responses. Yoel and Gabby are his points of reference and he acknowledges that. In a sense, Avi's case epitomizes the inner inadequacy between the particularity and communality (Nikulin, 2006). The Argonaut afforded ways to balance between the two, through its decentralizing effect and by changing the immediate dialogic sequentiality.

The study presented two extremely important discursive phenomena for the development of dialogic pedagogy: the emergence of discursive norms carrier and the development of multi-voicing, in a way that mediates the sometimes unbridgeable gap between the teacher's authoritative voice and the student. We tried to highlight the crucial role the Argonaut tool plays in this becoming. From a methodological point of view, the study demonstrates the vast potential trajectories of participation has when used for horizontal purposes.

REFERENCES

- Alexander, R. (2004). *Towards Dialogic Teaching* (4th edition), Dialogos.
- Baker, M., Bernard, F.-X. & Dumez-Féroc, I. (2012). Integrating computer-supported collaborative learning into the classroom: the anatomy of a failure. *Journal of Computer Assisted Learning*, 28, 171-186
- Ludvigsen, S., Rasmussen, I., Krangle, I., Moen, A., Middleton, D. (2011). Intersecting Trajectories of Participation; Temporality and Learning. In: Ludvigsen, S., Rasmussen, I., Lund, A., & Säljö, R. (eds.) *Learning across Sites*. New York: Routledge.
- Nikulin, D. (2006). *On Dialogue*. Lexington Books.
- Schwarz, B. B. & Glassner, A. (2007). The role of floor control and of ontology in argumentative activities with discussion-based tools. *The International Journal of Computer-Supported Collaborative Learning*, 2(4), 449-478.
- Schwarz, B. B. & Asterhan, C. S. C. (2011). E-moderation of synchronous discussions in educational settings: A nascent practice. *The Journal of the Learning Sciences*, 20, 395-442.
- Singer, P. (2009). *Practical Ethics* (Moosar Halacha Lema'ase), Jerusalem: Magness Press (In Hebrew).