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The development of discourse in the online Occasional Control of the O environment: between technology and multiculturalism

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Abstract

This paper is the result of one academic year's longitudinal study based on discussions that took place in seven online courses, as part of a blended learning academic program at the Hebrew University of Jerusalem. The study's aim was to identify and characterize developmental processes in online discussions, as well as to examine whether an online environment influences the discourse development within a culturally diverse group.

This qualitative study entailed horizontal and vertical analyses of the discussion process, utilizing the micro-textual method, in order to identify the nature and development progress of the discussions. In the course of the study, four directions were identified in the progression of the discourse: discourse developing via antinomic pairs, discourse developing in spiral fashion, discourse developing via technological aids, and an evolving metacognitive discourse.

The findings suggest that the online environment enables the development of an ethno-cultural discourse as an inseparable part of the narrative weave of each discussion (Jung et al., Culture and online learning: Global perspectives and research, 2015; GEMA: Online Journal of Language Studies 12(1):201-213, 2012) and is transformed into a space in which the narrative weave takes on life in different ways, built, in principle, from four types of discourse: personal-autobiographical, disciplinary, professional, and ethno-cultural (Dorfsman, El educador en línea: Más allá de la digitalidad, 2018).

Keywords: Computer-mediated communication, Cross-cultural projects, Interactive learning environments

Highlights

- The online environment becomes an arena for multicultural learning.
- Such learning is a multi-discourse weave composed of four types of discourse.
- Four discourse types and four directions were identified in the progression.
- This multi-discourse weave holds epistemological and pedagogical benefits.

Introduction

This paper is the result of one academic year's longitudinal study based on discussions in seven online courses, as part of a blended learning MA program at the Hebrew University



of Jerusalem. The study's aim was to identify and characterize developmental processes – if any – in online discussions. A second goal was to examine whether, and to what extent, an online environment facilitates interaction between participants of different cultures, nationalities, and religions, and how this interaction expresses itself in the online discussion.

The study was conducted on an MA program commencing in March 2016, comprised of nineteen students from nine different countries. Seven online courses were taught over two semesters, in asynchronous fashion based on a pedagogical model in which each lesson's focal point is a discussion group (forum). These semester-long courses either spanned fourteen weeks or were concentrated into a seven-week period. Every lesson of each course included an online discussion group for addressing the course's key issues on a weekly basis. This study is based on what took place there. Preliminary investigation was presented in the 9th annual International Conference on Education and New Learning Technologies (Dorfsman, 2017).

Background

As a result of the technological revolution and the accelerated development of online learning, today we frequently find students from different social and cultural backgrounds meeting in a shared online educational space (Avidov-Ungar & Eshet-Alkalai, 2014; Moore, Shattuck, & Al-Harthi, 2012; Youssef, Dahmani, & Omrani, 2015).

Many researchers have looked at various research issues arising from this phenomenon within the teaching and learning processes taking place in the online space: they have run comparative studies of distance vs. face-to-face learning, researched interaction within discussion groups, and studied perceptions of online lecturers (Huang, Lin, & Huang, 2012; Kahiigi Kigozi, Ekenberg, Hansson, Tusubira, & Danielson, 2008; Youssef et al., 2015). In recent years, moreover, much research has been dedicated to the significance of the technological environment and its impact on the perception of literacy, both cultural and digital (Alvermann & Eakle, 2007; Aviram & Eshet-Alkalai, 2006; Eshet-Alkalai, 2004; Schachter & Galili-Schachter, 2012; Weiser, Blau, & Eshet-Alkalai, 2018). One interesting development in this field can be seen in studies on cultural aspects of teaching and learning styles in the technological space, examining the impact of cultural characteristics (nationality, gender, tradition, values, etc.) on learning perceptions and teaching processes in the online space (Jung, Gunawardena, & Moore, 2015; Krish, Maros, & Stapa, 2012; McKenna, Zarestky, & Anzlovar, 2017; Moore et al., 2012; Wood & Smith, 2004).

The technological environment in general, and online forums in particular, have proven in recent years to be useful for improving and enriching the learning of the participating students (Avidov-Ungar & Eshet-Alkalai, 2014; Romero, López, Luna, & Ventura, 2013). To date, almost no studies have examined online discourse, for its relationship to cultural and multicultural aspects, or for the types and directions of discourses created in teaching and learning processes in technological environment.

Methodology

This study was a qualitative one based on the micro-textual method (Dorfsman, 2012, 2016). This method is based on an analysis of posts by participants in discussion groups. Its purpose is to examine the development of the discourse in an online course, using clear criteria for classification, coding, and identification of texts (Miles & Huberman, 1994).

The theory on which this method is based is the theory of action (Garrod & Pickering, 2004; Pickering & Ferreira, 2008), while the methodological model belongs to a process-based approach (Wagoner, 2008), and the level of analysis is the microgenetic one.¹

Seven online courses taught over two semesters were examined. All courses were taught in asynchronous fashion based on a pedagogical model in which each lesson's focal point is a discussion group (forum). Three of the courses spanned fourteen weeks, and four of them were concentrated into a seven-week period. In each course nineteen students attended.

The main issue examined in this study is the development of discourse in an online course discussion group. The data consists of the posts in the discussion groups for all the courses examined, which reflect the teaching and learning processes taking place therein. The horizontal and vertical analysis employed in this method was helpful in identifying the nature and development of the discussions throughout the program.

The online forum for all courses took place using the Hebrew University's "Moodle" platform, which allows for asynchronous dialog between participants. Both students and lecturers were aware of this study being done and gave their permission. All names here are fictitious.

The research question was: What are the directions in the development of online discourse in online academic courses, if at all, and how can they be characterized? Subquestions were: How does the online environment promote multicultural dialogue among participants, if at all? How can we define the impact of the technological environment on online discourse?

The examination proceeded, in accordance with the method, in three stages:

The first stage entailed a vertical reading and analysis of the entire discussion, examining all the course forums throughout the semester. This stage of research requires conceptual tools for analyzing texts. The texts represent the "raw material" that the researcher scrutinizes for signs or "milestones" that are likely to indicate the development of the discourse and the identification of its characteristics. I will refer to such milestones as content identifiers, that is, signs that appear in texts in various ways: comments, questions, responses, additions, etc. (Dorfsman, 2012, 2016; Guba & Lincoln, 1994; Miles & Huberman, 1994). In the micro-textual method, four types of content identifiers have been defined: disciplinary, personal, professional and ethno-cultural identifiers (Dorfsman, 2016, 2018). In Table 1 we can see an exemplification of the development of the courses by week.

In the second stage, a second reading and analysis was conducted, both vertically and horizontally, mainly comparing parallel forums. At this stage, keywords and speech events

Table 1 First stage: vertical reading and analysis

First Stage: Vertical Reading and Analysis	Course I	Course II	Course III	Course IV
Week 1	Professional identifier	Ethno-cultural identifier		Personal identifier
Week 2	Disciplinary identifier	Professional identifier	Personal identifier	
Week 3	Personal identifier	Disciplinary identifier		Ethno-cultural identifier
Week 4		Professional identifier	Disciplinary identifier	Professional identifier
Week 5	Ethno-cultural identifier	Personal identifier	Ethno-cultural identifier	Disciplinary identifier

were primarily identified (Catriel, 1999; Ortner, 1973) and allowed me to identify sequence and development in the discourse. Table 2 illustrates the tools for analysis, and the various discourse directions we found at this stage.

Finally, the third stage entailed in-depth analysis based on the components found (the content identifiers in the texts and the four directions of the developing discourse) and on the conceptualization of the research question achieved by means of such components. As can be seen in Table 3, the online environment becomes a type of weave composed of various types of discourse and various directions.

A final important note: The online courses researched in this study belong to the field of humanities. My findings and conclusions are strictly related to the type of discourse identified in these courses, and to the directions proposed. An interpretive study cannot rule out the possibility that additional studies in different fields would identify different types of discourse, along with different directions in their development. Therefore, I view the proposed typology as neither pure nor absolute. Human discourse is rich and complex, and the types defined are indeed not pure, but include elements of different types. Any discourse's specific categorization will be dictated by the dominance of a particular component therein. On the other hand, the proposed typology points to trends and directions that can be identified in online discourse in this program and with a specific population; undoubtedly, an interpretive study of different courses and populations will enable the identification of additional types and the expansion of knowledge and understanding on this issue. This study seeks to invite further research in this direction.

Results

In this section, I will describe four directions in the development of online discourse, as follows: discourse developing via antinomic pairs, discourse developing in spiral fashion, discourse developing via technological aids, and evolving metacognitive discourse. The directions of discourse are inspired by the work of Litwin (1997).

In the second stage of the methodology, we have already learned that, within any given discussion, we can identify directions of discourse. The "milestones" for doing so are the

Table 2 Second stage: Vertical & norizontal reading and analysis						
Second Stage: Vertical & Horizontal Reading and Analysis	Course I	Course II	Course III	Course IV		
Discourse Developing Via Antinomic Pairs	Professional identifier + keyword/speech events	Ethno-cultural identifier + keyword / speech events		Personal identifier + keyword/speech events		
Discourse Developing In Spiral Fashion	Disciplinary identifier + keyword/speech events	Professional identifier + keyword /speech events	Personal identifier + keyword/speech events			
Discourse Developing Via Technological Aids	Personal identifier + keyword/speech events	Disciplinary identifier + keyword/speech events		Ethno-cultural identifier		
Evolving Metacognitive Discourse		Professional identifier + keyword/speech events	Disciplinary identifier + keyword/speech events	Professional identifier + keyword/speech events		
	Ethno-cultural identifier + keyword/speech events	Personal identifier + keyword/speech events	Ethno-cultural identifier + keyword/speech events	Disciplinary identifier + keyword/speech events		

Table 2 Second stage: vertical & horizontal reading and analysis

Professional Personal-Ethno-cultural autobiogra discourse discourse In-depth analysis discourse phical conceptualization Discourse **Developing Via Antinomic Pairs** Discourse Developing In Spiral Fashion Discourse **Developing Via** Technological Aids **Evolving** Metacognitive Discourse The construction of the narrative texture in the online environment

Table 3 Third Stage: In-depth analysis and conceptualization

prominently featured keywords (Catriel, 1999; Ortner, 1973). As mentioned above, these are words repeating in various ways throughout the discussion, and serving both as connecters within the discourse and as an indication of the type of direction developing. It was also found that each direction constitutes a complex narrative weave, constructed from a combination of different types of discourse.

Discourse developing via antinomic pairs

One common direction is discourse that develops through antinomic pairs. This direction is largely composed of disciplinary discourse, as will become apparent. Each pair reflects the content of the message, and the sequence of titles enabled me to follow the development of the content via the development of the title pairs.

Participants tend to "jump" between pairs of concepts, opposite in meaning, and through them expand the discussion. In this forum, the assignment was:

Compare these two texts that were both written in the same year (1967) and are commentaries on the new reality.

For purposes of illustration, I will note in bold and italic the message titles, exemplifying the pairs that emerged. The discussion begins with an analysis of the content of the two poems, and these are the pairs:

Israeli vs. Diaspora

In Irving Layton's poem I get a sense of "finally we have reached where we should be and we get to define who we are". He goes through a list of all the ways Jews have been seen through time and in different places (Sam).

Past and future

As Sam said, Amichai's piece is intimate ... I would think that he is troubled by the uncertainty of the future, yet the quote from [the book of] Daniel is the disturbing element. It leaves little uncertainty as it seems to be a sure prediction of more anguish to come (Daniel).

Tone and vision

The difference between the 2 poems is both in the tone and in the vision. The tone of For My Two Sons is one of both anger, persecution, and ultimate power (Maia).

In this initial stage, Sam begins with a reference to time and place, but mainly place (Israel/Diaspora), while Daniel, with the help of the quote from the book of Daniel, transforms the emphasis on place (Israel/Diaspora) to an emphasis on time (past/future). At the end of this part, Maia brings to the fore what was hinted at in Daniel's post, speaking of tone and vision.

The discussion gradually shifts to the authors' language, perceptions, and identity, with the titles containing more pairs of opposites. Following this, Ben makes reference to the difficulty in understanding the poems, framing it in terms of two languages; immediately followed by Helena, who transforms "language + place" into perspective.

Two different languages

To be honest I find it incredibly hard to compare these two texts, since they are seemingly speaking two different languages... (Ben).

Two opposing perspectives/centers of identity

Writing from the Diaspora, Toronto in 1968, Layton poetically transmits to his two sons the harsh, ambivalent history of the Jewish people throughout the ages... In contrast, Yehuda Amichai writes from Jerusalem also in 1968. Here in the new and yet ancient land, Amichai describes Jerusalem in all her beauty, glory and sadness (Helena).

It ends with pairs that seem to return to the starting point, quite similar to the first pairs:

From here to there

From Toronto to Jerusalem. From anger and bitterness to the sweetness of returning to home sweet home... (Walter).

Diaspora vs. land of Israel

The contrast of these two poems seems to be screaming from the text. As Ashley pointed out how Layton writes from outside Israel and we all know Yehuda Amichai is from Jerusalem, you can see how their place of origin influences their tone, their words, and their outlook (David).

To live in the present or live in the past

In my eyes, the main distinction between Layton and Amichai is how much they want to inspire Jewish pride through a reaction to past events or an embracing of the present state of the Jewish homeland (Fred).

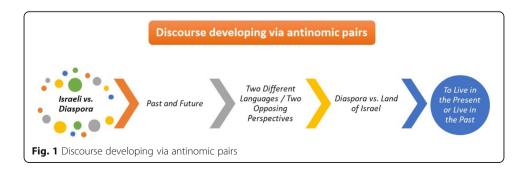
In the final section, Walter and David reinforce the significance of place as a locus of profound meaning related to feelings and emotions; that is, they "thicken" the meaning of place. Fred expresses these using categories of time: living in the present or in the past.

The antinomic pairs are replaced by new ones as the discourse progresses, giving it a developing meaning. It can be stated that throughout the course of the discussion, whose goal is to compare two literary works, a complex narrative structure develops out of the different types of discourse regarding the Diaspora/Israel issues on the one hand, and the past/present and future on the other. Thus, these concepts gradually assume different meanings as the discussion proceeds: Israel and Diaspora; past, present and future; hope and despair. Figure 1 illustrates this direction.

Discourse developing in spiral fashion

The second direction I identified is discourse developing in spiral fashion. Here, a clear link is evident between the discourse on the one hand and the content theme and progressive expansion influenced by different types of discourse on the other. I will treat each extension as a "touch", where the touches are as follows:

- Disciplinary e.g. when a participant combines the existing discussion with disciplinary knowledge from outside the course.
- Personal-autobiographical e.g. relating the discussion to experience, feeling, and/or personal opinions.



- Professional e.g. relating the discussion to classroom work or other professional issues.
- Ethno-cultural e.g. when the discussion is linked to religious, cultural, or national issues.

For example, in the second forum of the *Ethics and Jewish Education in the Thought* of *Emmanuel Levinas* course, the assignment is:

What, for Levinas, is a religion for non-adults and what is a religion for adults? What do you think of Levinas' idea of adult religion?

The central issue in the ensuing discussion is an analysis of the concept of religion for adults in Levinas' philosophical thought. Throughout the discussion, participants contribute to the subject from different directions and enable the narrative weave to develop through various touches of discourse.

Helena opens with a professional touch:

His proposal to reinvent Jewish education to promote deeper levels of rabbinic and Talmudic text study is an elitist version of education that would not appeal to the children nor the masses ... Although this type of character and value education has become extremely important in today's schools, I believe that the text study Levinas calls for would only be accessible to adults.

Maia returns to the core issue:

I'm not sure if I fully understand this concept in its entirety, but it seems that Levinas' idea of religion for adults does not leave much room for pluralism. And he is, of course, entitled to that opinion, though I'm sure that many disagree with him.

Sam reinforces the central issue, and thus the discourse continues to develop and expand:

Not a superstitious mode of thinking. Not mysterious. Promotes universalism, that is, it is available to anyone regardless of merit or genetics.

Arielle expands the discussion on the issue of responsibility and brings a personal touch:

I think Levinas sees Judaism as a religion for an adult when we see it as the radical acceptance of infinite responsibility to the other, and not the framework for religious enthusiasm ... At Limmud UK, I met Mutasim Ali, who is the only person to whom Israel granted the status of refugee last year ...

Lea voices criticism of Levinas' approach:

I think Levinas's idea of adult religion is dangerous. Even though I believe there are a lot of very interesting questions that arise from his philosophy which are absolutely debate-worthy, to rule out the mystical and solely faith-based aspects of Judaism is destructive to the Jewish people ...

Daniel answers her, introducing the ethno-cultural touch with his approach and his faith:

Can't rituals also become dangerous idolatry? Not because of our obedience to God's commandments, but rather in the danger of performing them without pursuing to know God more intimately? ... I question how one can love God without having a personal relationship with Him and understanding that He loves us Enough to involve Himself in our daily walk on earth.

The discourse continues to develop, and along comes another professional touch:

I think Levinas' adult religion, as I perceive it, is what should be taught to kids in Hebrew school at a young age, especially in the Diaspora (Samantha).

And a revealing personal statement is made by a student admitting to learning difficulties:

The text of Levinas proves very difficult for me as having no background knowledge to comprehend. Only after reading everyone's post did I come to have a little bit understanding of his concept (Ashley).

As the discussion draws to its close we see that the original issue is still very much on the table:

The message from this Parsha³ is clear: One cannot love God at the expense of man, for if he does, then he does not really love God. We must take care and continuously strive to make both our relationship with God and our relationships with our fellows the very best that they can be (Ben).

This final message, which received positive responses, summed up the discussion.

In conclusion, this discussion developed in a spiral fashion – meaning that its nucleus extended outwards via various touches of personal, professional, disciplinary, and ethno-cultural discourse. Throughout the discussion, participants contributed to the issue and expanded it in various ways, contributing to the construction of the narrative weave in the online environment. Figure 2 illustrates this direction.

Discourse developing via technological aids

The course *Israel Education and the Challenge of Zionism in the twenty-first Century* developed throughout an entire semester via a weekly online discussion. In the sixth week, we find the main topic to be discrimination in Israeli society against the community of Mizrahi Jews i.e. Jews from Arab lands.

To facilitate this, the lecturer offers a comparison between three singers, and brings a text that relates to one of them, after which the discussion is opened to the students. The clips are:

- Elvis Presley, "Hound Dog" (1956):

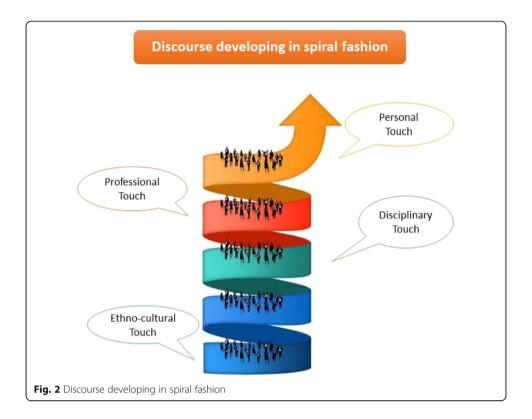
http://www.youtube.com/watch?v=lzQ8GDBA8Is

- Paul Simon, "Diamonds on the Soles of her Shoes" (1986):

http://www.youtube.com/watch?v=-I_T3XvzPaM

- Eminem, "Lose Yourself" (2002):

https://www.youtube.com/watch?v=_Yhyp-_hX2s



The text is:

http://www.elvis-history-blog.com/elvis-racism_2.html

The discussion progresses and succeeds in involving participants, both on the level of personal experiences and in disciplinary and professional insights. Additionally, we find people frequently employing technological aids. Early on (second post in the discussion), Hagit writes:

This topic is very relevant for me because I am a mizrachi jew and definitely witnessed some of the injustices that the zionist narrative imposes on mizrachi people through my family ... I really enjoy this tv show that highlights the experience of mizrachi jews in modern day Israel. https://www.youtube.com/watch?v=nCsTC8PkvcU

Three posts later, Arielle brings text with a picture of a musical band, with the title of the post being "From Idan Raichel to A-Wa". There, she tells the class about this band, writing:

Here are a few excerpts: "Just days after its release, the band's music video was featured as 'Video of the Day' on the popular online forum Muslim Hipsters. The coverage of A-Wa in French-language media has attracted online listeners from Lebanon and Morocco..."

At the end she responds to Hagit:

PS - Thanks again Hagit for sharing your story and sending us the link of the Neviim series, which I have fully watched. I was speechless. To those of you who are

interested, it is a very interesting complement to the class: https://www.youtube.com/playlist?list=PLCIZlRf3msfdRixt0gPk04Do_-Qm2nvEb

In the next post, Lucy writes a title in Hebrew (a rare occurrence – the rest of the discussion and the titles are all in English). It translates as "in every tongue".

Bekhol Lashon

There were many points to talk about this lesson! I will follow-up with Lea's post, though. My family and I are going to Los Angeles in a few days for Pesach ... The Occidental/Oriental orientations and divide continues to be a source of tension in the area. The local Jewish newspaper wrote about the divisiveness.

She adds:

We foster an expanding Jewish community that embraces its differences.

and includes another link:

http://www.bechollashon.org/about/mission.php

As a result of the discussion amongst participants, Lea sends Lucy her email, so that they can meet up when she arrives in Los Angeles. When the discussion draws to a close, Shaila writes:

Keeping the diversity of peoplehood theme in mind, I would like to share another video appropriate within the forum topic: Idan Raichel Project MiMaamakim w English Translation: https://www.youtube.com/watch?v=aQSJVsphUnY

I believe this music track demonstrates an interesting blend of cultural diversities that is a reality in Israel today as does this CD: http://www.jewish-music.huji.ac.il/content/ohlovely-parrot-jewish-womens-songs-kerala

This discussion is taking place around Passover time, and aside from the season's greetings and blessings, Lucy posts a link:

As seen on Facebook: Y Dadoun shared The Association of Immigrants from Central Europe's video.

Following this, she herself shares several musical links with the group, for example: "Israel says A-WA — 'Yes!' — to singing Yemeni sisters".

News story from 2015 – http://www.pri.org/stories/2015-06-04/israel-says-wa-yes-singing-yemeni-sisters

In conclusion, this discussion also developed progressively, with the main topic being how Israeli society deals with racism in general and with discrimination against the Mizrahi community in particular. Keywords such as *identity*, *pluralism*, and *hybrid* contribute to the development of discourse but, as in the previous direction, the main issue remains in the forefront (Catriel, 1999; Ortner, 1973).

This discussion was characterized by greater use of technological aids (links to texts, images, and YouTube videos). It contained many personal, professional, and ethnocultural touches, but notably, in this case, the technological component introduced in the lecturer's assignment was a basic axis around which the discussion revolved, right up until the final post. This direction is very characteristic of online discussion, and highlights the central role of the technological environment (Huang et al., 2012; Shaw, 2012). Its use by the lecturer, with the participants following suit, reveals more about the relationship between lecturer and group, as well as illustrating the potential of this resource in facilitating online discussions. Figure 3 illustrates this direction.

Evolving metacognitive discourse

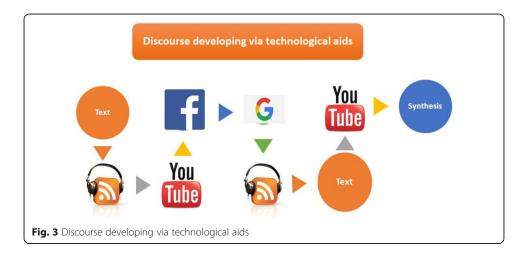
The final direction is an evolving metacognitive discourse. I noticed this direction in two courses, and identified the academic and pedagogic values in them.

In the final forum of the *Renewal of Practice in Israel Education* course, the main theme was the Mifgash (encounter). The assignment was:

Accounting for the power of the Mifgash

Please share with your fellow students what you believe to be the special power of the mifgash as a practice of Israel education. If you have participated in such a mifgash yourself, please do reflect on that experience so that others in the group can gain a sense of the force of such experiences. I encourage you to probe one another's comments so that we might dig deep into what has become a core practice for the field.

In this, the final discussion of the course, the lecturer encourages participants to connect the concept of Mifgash with their personal experience. In other words, personal-autobiographical discourse is deliberately encouraged so as to explore this concept – a pivotal practice in the field of Israel Education – in depth. In the discussion, noting that she lacks personal experience, Arielle turns from personal to disciplinary discourse, quoting Buber (who appears on the program curriculum):



Adam Stewart mentioned Buber in his paper which made me think of the I-Thou relationship. Buber speaks about it as the highest form of dialogue. I believe modeling a good mifgash means creating the framework for such an exchange to happen, with mutual curiosity and deep respect. (All of this is speculation since I have not been part of an explicit Israel education mifgash myself...)

An interesting conversation develops around the question of physical versus virtual mifgash:

To me, social media cannot replicate the love that is required for mifgash to be effective (Daniel).

Social media has provided many ostracized people with a community for the first time (Sam).

Good thoughts Sam! We share the same need for direct human contact, but as you rightly point out, Facebook has a place for some (Daniel).

The discussion continues with stories of personal experiences that took place in various programs, or descriptions of Mifgashim (plural of Mifgash) and their connection to the main article by Stewart. In the course of this discussion, issues connected to identity also arise:

Am I the Israeli or the American in the Mifgash? While I moved to Israel for Zionist reasons, it was never to become "Israeli", and while I served in the army, speak the language and have a passport, I'm very cognizant that my citizenship or my IDF [Israeli Defense Forces] service still doesn't make me feel Israeli. So how can I serve as the Israeli in the Mifgash? (David).

Next came two or three stories about Mifgash and personal experiences, until the final post, by Ben:

This course as a Mifgash

While reading Stewart's' description of the Mifgash as well as the comments below, it occurred to me that this entire course could be described as a Mifgash experience. This course through the forum posts as well as our intensive summer semester in Jerusalem has given us the opportunity to meet and get to know "real life Israelis". Whether they are natives like James and Lisa or American implants such as David, myself and Lea ... As Stewart explained, the power of the Mifgash is derived from authenticity ... This has also been my experience in the course. My fellow students come from literally all over the world, this experience has given me the ability to meet them and to develop a relationship with them in a truly authentic and meaningful way.

Here, the participant sums up the issues raised during the discussion in the form of a metacognitive reflection — a reflective recapping of the experience of this course, which invites the others to enter the same discourse. He speaks about the course as an encounter, physical and virtual; connects his explanation to theory (the text authored by Stewart); discusses the participants' identities and the program's contents; and refers to authenticity,

to meaning, and to Mifgash, the discussion's keyword. This post, one of the course's most popular, received six positive and validating responses. I would argue that the power of this direction lies precisely in its metacognitive quality. The student summarizes the discussion topic through collective experience, thereby allowing all, whether they have experienced the Mifgash or not, to gain a shared understanding of the issue.

As the discussions developed, students could quite often be found expressing difficulty with understanding texts, due to lack of personal experience, as occurred here in Arielle's initial post. These students always found ways to overcome the difficulty – whether through "adoption" of others' experience, or turning instead to theoretical content. In this case, a discussion that begins with a student's difficulty ends with a metacognitive discourse that bears for that student (and indeed all who struggle to understand due to lack of personal experience) the message: "You too have attended a Mifgash: this very program itself! Reflect on this and you will be able to deeply grasp its significance as I do!"

The second example that I witnessed of evolving metacognitive reflection occurred in the final forum of the *Visions in Jewish Education* course. The lecturer used his closing message to compare the forum with the "arena" of rich pluralistic visions, bringing as an example the course itself. Then he compared the forum with the final assignment:

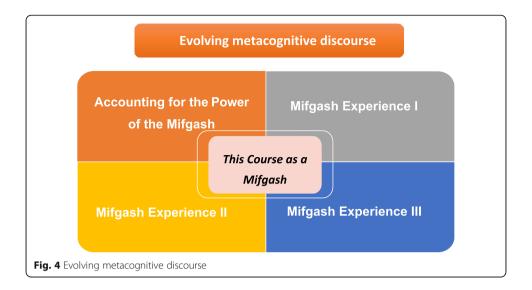
I just wanted to wrap up the forum and the course by echoing the comments of Jessica and Marineth. The forum of the course exemplified a rich and diverse pluralistic Jewish educational environment. The dialogue was conducted in a respectful and supportive manner in which different views were accepted. But no less important was the fact that the acceptance did not dilute our particular commitments. Pluralism should not efface differences and our ability to disagree with one another.

The forum for this week also exemplified the kind of responses that should be incorporated in the final paper. Many of the posts this week attempted to dialogue with Kaplan and other thinkers regarding their relevance for your educational vision and practices. What is important is that you do not include wholesale affirmations and rejection of a particular thinker. I hope that your educational vision incorporates elements taken from different thinkers and does not rely wholly and uncritically on a single thinker. Secondly I encourage you to attempt to apply thinkers to issues towards which they themselves did not grapple. For example, in this week's forum there was a discussion of what would be the response of Kaplan and Heschel to the growing presence of intermarried couples in the American Jewish community.

Unquestionably, such metacognitive discourse served to exemplify important topics in the course, and such discourse can serve lecturers in a variety of ways when teaching online courses. Figure 4 illustrates this final direction.

Discussion

At the start of the discussion about the research results, and leaving aside the initial research questions, we probe the pedagogical meaning of discourse development: What does a "developing discourse" mean? What are the pedagogical implications for the



development of a class? And additionally, what are the epistemological implications emerging from the composition of the online dialogue's narrative weave?

Firstly, and given the four types of discourses found, our impression was one of two types of situations: On the one hand, we saw that progressive discourses (discourse developing via antinomic pairs and in spiral fashion) appeared most frequently in the forums, and generally as responses to a type of "spontaneous pedagogy". In this type of development, the teacher's influence appeared absent; it was rather generated from within the spontaneous interaction of the group, of which the teacher is a part.

The progressive types of discourse, especially the discourse developing in spiral fashion, encourage participants to make their contribution from their own experience. In this case, they highlighted the need of the participant to share parts of themselves with the collective, for example; aspects of their autobiography, their disciplinary knowledge, their professional experience, or their ethno-cultural affiliation. While the discourse remains spontaneous, it may be epistemologically rich and varied; and again, this is particularly true in the discourse developing in spiral fashion.

The other two types of discourse, the discourse developing via technological aids and the evolving metacognitive discourse, seemed to originate in a more active intervention by the teacher. The participants were, on the one hand, limited by the orientation or constraints proposed by the teacher; but on the other hand, this type of dialogue could lead to greater depth in some areas.

We thus found ourselves faced with two types of pedagogical developments: a "spontaneous pedagogy" and an "oriented pedagogy". In both, participants advance based on their own experience or knowledge, but it would seem that in the "spontaneous pedagogy", participants feel freer to enrich the dialogue through personal references, be they autobiographical, disciplinary, professional, or ethno-cultural.

While no gender differences were perceived in the discussions, ethno-cultural belonging did palpably come into play. For example, a participant born in the US but migrated to Israel asked in the forum about his own identity and "citizenship" ("Am I the Israeli or the American in the Mifgash?); or, a participant from Korea

opened his participation by clarifying that "he is not Jewish" (Dorfsman, 2016). The professional component might, too, have an effect — for example, when a student from China opened her participation clarifying that "she has no teaching experience" (Dorfsman, 2016). However, the influence of the ethno-cultural component seemed more powerful, given the kind of content that was being worked on, and the type of population that exists (see Dorfsman, 2018).

Conclusions

In this paper, I posed the following research question: What are the directions in the development of online discourse in online academic courses, if at all, and how can they be characterized? In the Results section I portrayed four possible directions in the development of online discourse: discourse developing via antinomic pairs, discourse developing in spiral fashion, discourse developing via technological aids, and an evolving metacognitive discourse. As stated, I do not view the proposed typology as either pure or absolute. It follows that this typology, and the directions that result from it, ought to represent a significant first step toward a deeper understanding of online discourse.

The research sub-questions were: How does the online environment promote multicultural dialogue among participants, if at all? How can we define the impact of the technological environment on online discourse?

The findings cited here suggest that an online environment enables, in a variety of ways and corresponding to the issues under discussion, the development of an ethnocultural discourse as an inseparable part of the narrative weave in online discussion (Jung et al., 2015; Krish et al., 2012).

Within this weave, the ethno-cultural component may have a profound impact on the dialogue and even a multiplier effect. For example, in a recently presented paper (Dorfsman, 2018), I cited the example of "Christian", a Christian student who says: "As a Christian, I am embarrassed, and deeply ashamed for the Christian part of persecution of Jews in history". Leah, a Jewish student, then responded: "Hey Christian! I can really connect to this sentiment. If I did not feel I had a personal connection with God, a lot of 'Jewishness' would be lost on me".

It seems that comments on cultural and religious issues affected and generated new responses in this order. Additionally, one of the central insights gained following data analysis was that the technological environment is transformed into a space in which the narrative weave takes on life in different ways, built, in principle, from four types of discourse: the personal-autobiographical, the professional, the disciplinary, and the ethno-cultural (Romero et al., 2013; Youssef et al., 2015). This narrative weave constitutes an intimate and reliable multi-discourse space existing between the participants – one in which they can comfortably conduct, and allow themselves to become involved in, a discussion. This weave holds epistemological and pedagogical benefits. The epistemological dimension enables us to understand the discourse complexity, its composition and its characteristics. In addition, the weave and its scope bring into being and influence various discourse directions that develop during discussions. The pedagogical benefit lies in the fact that understanding the weave and its complexity may conceivably prove useful for lecturers when engaged in course development and teaching.

In this study, I chiefly dealt with the narrative structure of the discussions, the construction of discourse, and the directions of its development. As stated, the research in this study was carried out on online discourse for courses belonging to the field of humanities. Future research could focus on other knowledge areas and identify other types and directions of discourse. It might, in addition, focus on how online discourse is moderated, styles of moderation, and the development of a pedagogic typology that could shed light on the role of the facilitator in a multicultural online environment.

Endnotes

¹The microgenetic level is an analytical level that is capable of testing behaviors occurring within short time spans – microseconds, seconds, minutes, hours, or weeks – to grant them meaning and justification (Diriwächter & Valsiner, 2008).

²Limmud UK is a very large non-academic annual Jewish conference, in which voluntary presenters speak on an extremely wide range of topics pertaining to Jewish life. The website invites participants to "debate burning contemporary issues, jam with a band, study Torah, create art, or just renew old friendships and build new ones too" https://limmud.org/conference/).

³Meaning "Section of the Bible", often specifically the one being read that week in synagogues.

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Authors' contributions

The author read and approved the final manuscript.

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References

Alvermann, D. E., & Eakle, A. (2007). Challenging literacy theories and practices from the outside. In *Adolescent literacy instruction: policies and promising practices*, (pp. 64–81).

Avidov-Ungar, O., & Eshet-Alkalai, Y. (2014). TPACK revisited: a systemic perspective on measures for predicting effective integration of innovative technologies in school systems. *Journal of Cognitive Education and Psychology*, 13(1), 19–31.
Aviram, R., Eshet-Alkalai, Y. (2006). Towards a theory of digital literacy: three scenarios for the next steps.
European Journal of Open Distance E-Learning. http://www.eurodl.org/materials/contrib/2006/Aharon_Aviram.htm.
Accessed 25 Jan 2007.

- Catriel, T. (1999). Milot mafte'ah: Dfusei tarbut ve-tikshoret be-Yisrael. Tel Aviv: Haifa University Publishing/Zemora-Bitan in
- Diriwächter, R., & Valsiner, J. (2008). The past and future of the whole. In R. Diriwächter, & J. Valsiner (Eds.), *Striving for the whole: creating theoretical syntheses*, (pp. vii–xiii). Somerset: Transaction Publishers.
- Dorfsman, M. (2012). The evolution of teachers' pedagogical thinking in the process of preparing on-line courses for Jewish education in the diaspora. (Doctoral dissertation). Jerusalem: Hebrew University of Jerusalem in Hebrew.
- Dorfsman, M. (2016). El método micro-textual como herramienta de análisis de foros en línea en contextos multiculturales (the micro-textual method as a tool for analysis of online forums in multicultural contexts). RED – Revista de Educación a Distancia, 51 in Spanish. http://revistas.um.es/red/article/viewFile/275171/199651. Accessed 18 Apr 2016.
- Dorfsman, M. (2017). Directions in the development of discourse in an online multicultural environment. *Paper presented at the 9th International Conference on Education and New Learning Technologies*, Barcelona, Spain.
- Dorfsman, M. (2018). El educador en línea: Más allá de la digitalidad. *RED. Revista de Educación a Distancia*, 56 ln Spanish. http://www.um.es/ead/red/56/dorfsman.pdf Accessed 2 Feb 2018.
- Eshet-Alkalai, Y. (2004). Digital literacy: A conceptual framework for survival skills in the digital era. *Journal of Educational Multimedia and Hypermedia*, 13(1), 93–106 https://www.learntechlib.org/p/4793/article_4793.pdf Accessed 15 Feb 2007.
- Garrod, S., & Pickering, M. (2004). Why is conversation so easy? Trends in Cognitive Sciences, 8(1), 8–11.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin, & Y. S. Lincoln (Eds.), Handbook of qualitative research, (vol. 2, pp. 163–194).
- Huang, E. Y., Lin, S. W., & Huang, T. K. (2012). What type of learning style leads to online participation in the mixed-mode e-learning environment? A study of software usage instruction. *Computers & Education*, 58(1), 338–349 http://192.192.107.208/FileUpload/upfile/%E9%BB%83%E5%9C%8B%E8%8F%AF20120116162433_ CAE%E6%AD%A3%E5%BC%8F%E7%89%88.pdf Accessed 3 Mar 2013.
- Jung, I., & Gunawardena, C. N. (Eds.). (2015). Culture and online learning: Global perspectives and research. Stylus Publishing, LLC.
- Kahiigi Kigozi, E., Ekenberg, L., Hansson, H., Tusubira, F. F., & Danielson, M. (2008). Exploring the e-learning state of art. Electronic Journal of E-Learning, 6(2), 77–88 http://www.ejel.org/issue/download.html?idArticle=67 Accessed 12 Apr 2009.
- Krish, P., Maros, M., & Stapa, S. H. (2012). Sociocultural factors and social presence in an online learning environment. GEMA: Online Journal of Language Studies, 12(1), 201–213 http://ejournals.ukm.my/gema/article/download/29/23 Accessed 21 Sept 2014.
- Litwin, E. (1997). Las configuraciones didácticas: Una nueva agenda para la enseñanza superior. Buenos Aires: Paidós in Spanish. McKenna, K., Zarestky, J., & Anzlovar, M. (2017). Culture and communication online: the inclusion of international and non-native language learners. In K. L. Milheim (Ed.), Cultivating diverse online classrooms through effective instructional design, (p. 116). USA: IGI Global.
- Miles, M. and Huberman, M. (1994). Qualitative Data Analysis (second edition). Beverly Hills, CA: Sage.
- Moore, M. G., Shattuck, K., & Al-Harthi, A. (2012). Cultures meeting cultures in online distance education. *Journal of E-Learning and Knowledge Society*, 1(2), 187–207 https://www.learntechlib.org/p/43302/article_43302.pdf. Accessed 28 Sept 2014.

 Ortner, S. B. (1973). On key symbols. *American Anthropologist*, 75(5), 1338–1346.
- Pickering, M., & Ferreira, V. (2008). Structural priming: a critical review. Psychological Bulletin, 134(3), 427.
- Romero, C., López, M.-I., Luna, J.-M., & Ventura, S. (2013). Predicting students' final performance from participation in online discussion forums. *Computers & Education*, 68, 458–472 https://doi.org/10.1016/j.compedu.2013.06.009.
- Schachter, E. P., & Galili-Schachter, I. (2012). Identity literacy: reading and teaching texts as resources for identity formation. Teachers College Record, 114(5), 1–37 http://www.tcrecord.org/Content.asp?Contentld=16415. Accessed 2 Oct 2012.
- Shaw, R.-S. (2012). A study of the relationships among learning styles, participation types, and performance in programming language learning supported by online forums. *Computers & Education*, *58*(1), 111–120 https://doi.org/10.1016/j.compedu.2011.08.013.
- Wagoner, B. (2008). Developing "development" in theory and method. In E. Abbey, & R. Diriwächter (Eds.), Innovating genesis: microgenesis and the constructive mind in action, (pp. 41–63). Charlotte: Information Age Pub Inc..
- Weiser, O., Blau, I., & Eshet-Alkalai, Y. (2018). How do medium naturalness, teaching-learning interactions and Students' personality traits affect participation in synchronous E-learning? The Internet and Higher Education, 37, 40–51. https://doi.org/10.1016/j.iheduc.2018.01.001.
- Wood, A. F., & Smith, M. J. (2004). Online communication: Linking technology, identity, & culture (Second Edition ed.). USA: Routledge.
- Youssef, A. B., Dahmani, M., & Omrani, N. (2015). Information technologies, students' e-skills and diversity of learning process. Education and Information Technologies, 20(1), 141–159 https://hal.archives-ouvertes.fr/file/index/docid/ 937145/filename/EIT_paper_Revised.pdf Accessed 20 July 2016.