



adolescent argumentation in online spaces

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paper online at <http://everydaycognition.org>

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broader research project

Understand the development of scientific thinking & technological fluency through studying social practices.

3 targeted comparative studies:

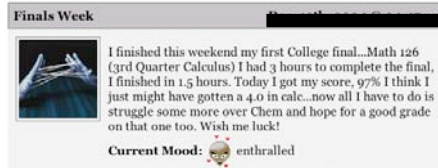
- Ethnography of 4th - 6th grade technology & science activities across social settings
- Adolescents online communication & interaction
 - focus on IM & other forms of computer-mediated communication
- **Mixed method study of engineering students**
 - instant messaging, blogging, web development & online gaming

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why study the online activities of kids?

- Teens develop, maintain, & negotiate **peer relationship**
 - Identities & peer cultures (Corsaro, 2003; Adler & Adler, 1998; Kyratzis, 2004)
- Impacting & impacted by **home & family life**
 - Access, gender issues, & impacts to school learning
- Learn **skills that can be leveraged** for the future
 - Theory-building, argumentation, & multimodal texts (Lemke, 1990; Ochs & Taylor, 1992; Ochs, Gonzales, Jacoby, 1996; Goodwin & Goodwin, 1987).
 - **Everyday life & career**



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today's goal

- The discursive activity of blogging (keeping interactive online diaries in a community of fellow diarists) as an **identity-building argumentation practice**
- Young adults **design**, produce, & distribute (Kress and van Leeuwen, 2001) arguments about who they are through using multimodal **orientational, presentational, & organizational** resources (Lemke, 1998)
- **Structure of talk**: define key terms, setting and methods, analytical tools, present 1 case study, & discussion.

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key constructs defined

- **Argumentation**
 - Explanation with evidence
 - Identity claims: “Who I am in relationship to my peers?”
- **Technological social practices**
 - Microculture
- **Identity in a community of practice**
 - Fluid sense of self in relationship to others
 - Changing roles in community
 - Identity performed online through designed argumentation discourse



settings & participants

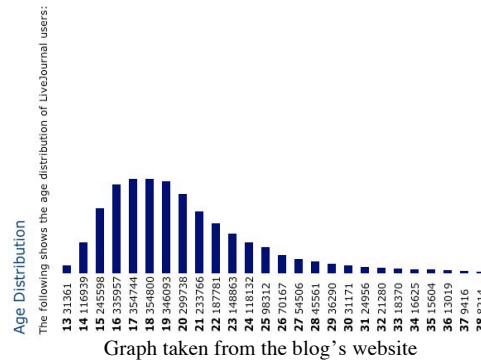
- Research university in the Pacific Northwest of the USA
- 10 engineering & pre-engineering students
 - 2 interviews
 - Self-documentation of a week of technology use
 - Ethnographic observation of online activities
 - Analysis of online & print documents
- Students:
 - 3 females, 7 male
 - 7 European American, 1 Latina & 2 Asian Americans
- Studying the “most religious” as a sampling strategy (James)
 - Engineering students; trend setter with technology & future designer
 - High technology users - IM & other online social practices



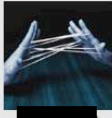
Juli's online argument about her identity

- 18-year old, freshmen-engineering student
- Diary-keeping on blog website within peer group
- 8 million accounts - mostly teens & young adults
- 67% users females
- Most users from:
 - USA, Canada, UK, Russian Federation, Australia, & Philippines

Note: for confidentiality, the blog service is not named here.



Profile



The enemy of my enemy is my friend

Navigation


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Page Summary

Sooo close



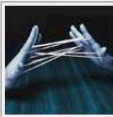
I need a vacation. I feel groggy, tired and not interested in the massive amount of studying I have to do in order to pass some of my silly classes. I just have no drive at the moment. I've got one more week, then finals before I get to do nothing and relax. Until then I have to deal with math (not too hard), Chem (insanly hard) and Philosophy (I just don't get it sometimes) I just want this quarter to end. Looks like all my breaks are going to be filled up with scheduling, working, and trying to remain sane!

Ugg, this is going to be a long, long two weeks.

Current Mood: blank

Current Music: some comercial jingle
[\(1 comment | Leave a comment\)](#)

Odd



Why are unpacking instructions packed inside the box?

Current Mood: confused
[\(2 comments | Leave a comment\)](#)

Calling all Knitters!

Juli's blog in home view

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4



key features of blogging practice

From observations: not solitary like traditional diary-keeping or web-posting. It's a **community activity**: Friends Page.

- Intertextual activity -- refer to others' blog posts & web.
- Peer pressure to blog and to post within communities.
- Expectation is the blog posters are friends
 - Breakdown of the online-offline dichotomy
 - Example: "Are you just going through my blog?"
- **What was the purpose** of blogging? Individual posts vary: invitations, current project, current thought, "hey, this was cool . . .", & "I'm having a good/bad day".
 - Throughout the blogs posts, young adults design an argument about their identity within their community by providing evidence for their belonging claims.
 - **Blog argumentation as identity work.**

analytical framework

multimodal discourse (Kress & Van Leeuwen, 2001)

Layers of meaning beyond the text: discourse, design, production & distribution:
“Design stand midway between content and expression. . . . Designs are meant to realize discourse in the **context of a given communication situation**” (p. 5)

social semiotics (Lemke, 1998; 2002)

to understand meaning-making, examine the interactions in regards to people’s use of available resources of various semiotic modes (i.e., language, images, sounds, color)

- **presentational resources:** how we speak about something, how we make our predictions or arguments in a structural way
- **orientational resources:** the “stance” or valuing that the producer creates in the context of the community
- **organizational resources:** how the whole argument & parts of an argument work together, in this case over time

Juli’s argument #1: i am a competent engineer; 1 of 3

Current mood:  geeky

I know this labels me...but I saw it in Fox Trot and I thought it was clever...

$M(2.71828)r^2 (1/y)^{-1} * (x^2)^{1/2}$ (force/acceleration)

I hope you enjoy it, if you get it



That is indeed truly pathetic... you should feel ashamed of yourself.

[\(Reply to this\)](#) [\(Thread\)](#)



[1](#)
[2](#) [1](#) [\(link\)](#)

no I should feel ashamed of myself because I made it more accurate and correct by replacing 2.71828 with $\lim_{n \rightarrow \infty} (1+1/n)^n$ and by dividing (force/acceleration) by s to get the number of s's right....

besides fox trot did it first

Juli's argument #1: i am a competent engineer; 2 of 3

AHHH

My hand had died and I fear that it will never come back. I just completed an insane problem tonight...it kills, and its easy to make small mistakes...read on if you are math crazy...

To save you from explaining how it all works, I will just do the basic derivatives...

Start with $Y=(A\sin 2t + B\cos 2t)e^{-t}$ then try to find Y' and Y'' . Here let me help. $x = (A\sin 2t + B\cos 2t)$ $y=t$ and $z=e^{-t}$

$$Y'=x'yz + xy'z + xyz'$$

$$Y''=x''yz + x'y'z + x'yz' + x'y'z + xy''z + xy'z + x'yz' + xy'z + xyz''$$

put this in the equation $y'' + 2y' + 5y = 4\cos(t)e^{-t}$

getting:

$$x''yz + x'y'z + x'yz' + x'y'z + xy''z + xy'z + x'yz' + xy'z + xyz'' + 2(x'yz + xy'z + xyz') + 5(xyz) = 4\cos(t)e^{-t}$$

plug in the real values of $x, x', x'', y, y', y'', z, z', z''$. Then solve for A and B

It was annoying and agrivating. And now it killed my hand.

[\(Post a new comment\)](#)



Wow, that takes me back.

closes window before she dies attempting to remember how to do calculus

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Juli's argument #1: i am a competent engineer; 3 of 3

presentational resources:

- Presents math problems with formulas using math language
- Talks about her work in engineering
- Talks about her homework

orientational resources:

- Hides math formulas under link for people who like math
- “ $M(2.71828)r^2 (1/y)^{-1} * (x^2)^{1/2} (f/a)$ ” Geeky emoticon
- “read on if you are math crazy...”
- Uses productive icon & uses a different avatar in regular posts
- Consequential identity argument: USA female under-representation

organizational resources:

- Math formulas & terms spread throughout
- Every page a link to engineering identity

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Juli argument #2: i am a knitter; 1 of 3

Calling all Knitters!



HAHAHA!! I have finished my sweater! A whole complete, functional sweater! Special me, now I think I am the only person I know who have made a sweater...wow.

Current Mood: 😊 creative

[\(2 comments\)](#) | [Leave a comment](#)

Much Needed Post



Okay people let me tell you what has happened. Lets start small. I've started to follow [redacted]'s path and have begun to knit. So far its just a thin scarf but I hope to perhaps one day make a sweater. Perhaps by next Christmas I can save money on presents and send my family home made scarfs. A little past that I have moved out of my house,

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Juli argument #2: i am a knitter; 2 of 3

Knitting



Well, my first sweater looks like a first sweater, and I like it but wish there were a few changes...my second sweater...finished today...looks so ugly. I don't know if I messed up the pattern, didn't read something or what, but it doesn't match the photo and looks hideous...not sure what I am going to do with this one. Starting a Christmas gift, a table runner and placemats. The table runner is narrower than anticipated, but its working out well. I may even have to learn to crochet to finish this the way the pattern wants to. Crochet edging around each placemat.

[\[redacted\]sknitters](#) (2000000)

Name: home to the younger generation of knitters

About: This site is for the young at heart knitter, the young knitter, the knitter designer etc. This is where we can all meet and hey maybe even find a friend!

Interests: 3: [crocheting](#), [knitting](#), [yarn](#). ([Modify yours](#))

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Juli argument #2: i am a knitter; 3 of 3

presentational resources: text & images icon of yarn as her avatar

- Knitters as a friends link — 20s knitters
- Announcement: “. . . have begun to knit. . . .”
- Followed multiple posts

orientational resources: valuing

- Uses artistic representations of string in avatar — knitting is important
- Talk of “hard projects” — the sweater
- As newcomer, ask for help from experienced knitter
- Personally consequential identity: knitter among peers

organizational resources: parts & whole

- By linking to knitting group — more knitting content on her page that she alone produces — a larger argument
- Understanding of the changing roles & move to advanced knitting

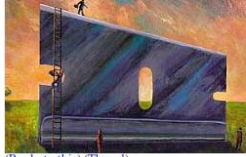
Juli's peer group image argument #3

1. Emic: Coordinated activity which is a visual playful argument
 1. a novel form of argument with the technology, the culture, surrounding technology, and the teens' fluency with technology allows
2. Etic: Identity argumentation where the activity is evidence for their claim of group cohesion

Because [redacted] is desperate to participate in a GIF war!

"How GIF War works: I post a photo to my journal. In the comments page, you post a photo of something that would defeat the original photo. Then, you try to defeat the latest photo posted. Example: If there's a picture of Jesus, you might post a photo of Romans. Then, you might post a photo of Goths. (As in, the Goths defeated what was left of the Roman Empire.) Then, you're free to interpret Goths as either uncouth warriors from Northern Europe, or sullen teens who wear black and listen to the Cure, and perhaps you put up a picture of pastels, and to defeat pastels, you put up "flannel" or an image that otherwise depicts the 1990s."

image argument; 1 of 3



[\(Reply to this\)](#) [\(Thread\)](#)



[\(link\)](#)



Nair® Cool Fruit Wax Strips

The War:

One person posts an image & the next group member tries to beat the image with another image.

This excerpt:

An electric razor beats a straight edge razor and a waxing is better than electric—to this group at least.

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image argument; 2 of 3



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GIF image war; 3 of 3

Young people's facility with arguments as a social activity . . .

- Comfortable with a variety of meanings for same image
 - Conceptual, material, & multiple intertextual meanings
- Can “read” & “write” through these images to conduct an image war without adding additional meaning from words/text
- Young people's ability to coordinate group action
- A recreational activity & group solidarity activity
 - Group identity-building practice

summary across Juli's case

- Juli uses her blog to design for her arguments about her multiple identities
- Blogging as an identity-building argumentation practice
 1. Consequential identity for society – I am a competent engineer
 2. Consequential identity locally – I am a knitter
 3. Group identity consequential for peer group – we are together

discussion

- What does this case tell us about online argumentation practice & the work it does in teen peer culture?
 - Individual and group identity building practice
 - A blend of the teens' fluency with technology, affordances of the technology, & the teens' techno-microculture
 - Connections to multimodal reading in disciplines of art, design, science & more
- Analytical framing: Is this multimodal discourse & social semiotics frame a useful way to look at argumentation?