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Concept Development in Action:

Adolescent Development in One Student-Made Video

From a Vygotskian Perspective

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Abstract

This paper analyzes the video of two Native American youths participating in an introductory "digital arts" program. This particular video is unique among those studied in terms of an improvisational and playful quality and in the relationship between unedited and edited video. The video demonstrates an emergence of higher order thinking that reveals the activity of concept formation as Lev Vygotsky described it. This movement is presented, and the video is explored as an exemplar of adolescent development. The development of concepts, the engagement of personality, the combination of art and philosophy, an active interpretation of objects and events, and the role of agency are traced throughout the spontaneous recordings and into the edited project.

Introduction

I want to tell the story of a video: a one-minute, rather dizzying, "digital art" *montage* (Eisenstein, 1949/1977) that has no sound track due to a faulty laptop but that nevertheless conveys—upon analysis—a great deal about the thinking of two male,

adolescent residents of a Native American boarding school. This untitled video project stands out from the others produced in this school and during observations at two other schools because of the thematic consistency and the level of improvisation that went into its initial work. The project is unique and specific to the individual and political histories of its videographers, but the video and its *cademes,* or unedited video shots from which the project emerged (Worth & Adair, 1972, p. 89), convey a process of cognitive development and other typically adolescent characteristics that are consistent with the writing of Lev Vygotsky. Moreover, the cademes bring their audiences into the activities of the youth as we literally see events from their perspective.

My purpose in telling this story is to contextualize adolescent development according to the schools they experience, and though I am describing only one pair of atypical youth at the moment, their story reveals processes that are not unique. A central idea of Vygotsky's concerns the connection between *thought* and *word* (2004e). Of course, in the case of this video, it is frequently not words but images that are central to the analysis, but their function as *signs* rather than simple visual stimuli or records of events presents an important vantage of the youths' thinking. Vygotsky wrote, "The relationship of thought to word is not a thing but a process, a movement from thought to word and from word to thought" (p. 72). This process is the topic of this paper. Part of it includes the distinction of "two planes of speech" (p. 72) that I will refer to as the *material* and the *meaningful* planes. The material plane is the auditory or visual sign that is used as a mode of communication. It is concrete and observable and gives analysts a

common subject. The meaningful plane, however, is immaterial and illusive, and most importantly, multi-layered. Signs have multiple meanings for an individual (Vygotsky, 2004e), and these potential meanings are shaped by the individual's position in society while simultaneously confronting the meanings imposed from other positions (Hodge & Kress, 1988). Wertsch (1991) argued for the addition of Bakhtin's work to more fully accomplish a sociocultural approach: His focus on *utterance* rather than *word* can achieve a more contextualized analysis of meaning, and the analysis of voice maintains the speaker's place within society. It is frequently possible to understand a sign only within the context of its utterance, regardless of whether the utterance is linguistic or not. My emphasis on context and meaning seeks to ask how meaning is and is not shared without losing sight that meaning is always social. In general, a psychological investigation of development or adolescence must maintain the social nature of individual changes.

My analysis begins with Vygotsky's (2004a; 2004e) argument that word [or sign] and thought cannot be separated yet are not the same. "Psychological analysis indicates that this relationship is a developing process which changes as it passes through a series of stages. Of course, this is not an age related development but a functional development" (p. 72). This emphasis on function is much of what maintains the sociality of development. In this case, Vygotsky traced the function of language in the emergence of private speech, finding that the purpose of words shifted from one of communication with others to a way of guiding one's own actions. He concluded that, during these moments of private speech, the distinction between the material and semiotic planes did

not exist; there was a brief merging of words and meaning as the purpose of speech was in the process of being transformed.

The cademes under consideration have a distinct similarity to the private speech of young children: They seem to be a materialization of thought at least to the extent that they rarely show concern for their audience, recording instead the videographers' mediated interactions with the world. A similarity, therefore, exists between these cademes and the private speech of children because the youths' uses of the video camera shift from one of simply recording their engagement with the world to changing *how* they relate to the people and objects around them. Few of the cademes show any relation to or concern for the digital art piece. Even as the youth engage in verbal conversations with a clear communicative purpose, the cademes were not aimed at communicating but rather at changing their own experiences within the school.

Yet, clearly, these youth, who gave themselves the pseudonyms Wicket and Jerome, were not young children. They were adolescents, and adolescence is the period of transition from childhood to adulthood that involves a wide range of changes—changes to which developing cognitive processes respond and changes which developing cognitive processes make possible (Vygotsky, 2004a). Vygotsky specifically discussed changes in personality, understandings, self-consciousness, metaphor usage, and use of will or intention, but the development of higher order thinking is central to all aspects of adolescent psychological development: "[The] development of thinking has a central, key decisive significance for all the other functions and processes" (p. 470). Research of

adolescent advances as Vygotsky reviewed (2004e) and the many studies since have revealed a shift in conceptual thinking that drives the transition from childhood to adulthood. Vygotsky found that the typical adolescent will unevenly and insufficiently engage concepts in their everyday activities but, in relation to schoolwork, can be expected to make greater use of true concepts (2004a; p. 462). In examining video production that is atypical school work and highly improvisational, I intend to contrast the usual use of signs with that involved in "finished" work.

The context, therefore, in which the diversity of adolescent activities and transformations occur is central to explaining them. Vygotsky, however, neglected some important aspects of context: Litowitz (1993; 1997) and Holland, Lanchicotte Jr., Skinner, and Cain (1998) have examined ways in which social relations impact development that have nothing to do with the content of an activity. In regards to personality, Vygotsky was specific about the importance of the social structure.

> The structures of higher mental functions represent a cast of collective social relations between people. These structures are nothing other than a transfer into the personality of an inward relation of a social order that constitutes the basis of the social structure of the human personality. (2004b, p. 474)

The role of adolescents as neither children nor adults, for instance, is a part of their development, and in many ways, schools aggravate the tensions brought about by having a sufficient capacity to participate in most aspects of life without have the permissions or social acceptability to (Lemke, 1993). Add to this that school activity can have few

connections to the “real world,” and conflict seems guaranteed.

In his work with adolescents in video production programs, Goodman (2003) has found that video can bridge the gap between life in and out of school, but programs do not necessarily use this potential (Beaty, 2005). The fact that this video was created at a boarding school maximizes the discrepancy between being in school and being at home. The cultural disparity between being Native American and attending a school that—despite honoring the students’ identities in many ways—follows Western traditions creates further conflict that is an important part of the context.

The Nature of Video

The growing prevalence of video production courses in American high schools presents an important opportunity to study adolescent activity. My method grew out of Worth and Adair’s (1972) study of Navajo films and Bellman and Jules-Rosette’s (1977) related work in Africa. Worth and Adair sought cultural differences among Navajo who were unfamiliar with film through an analysis of patterns and subject matter in the finished product. Bellman and Jules-Rosette extended this through their analysis of *cademic markers:* They found that their informants’ choices of techniques and movements during the recording process meaningfully divided cademes and revealed the videographer's understanding of events (p. 5). In applying their analyses, I have found that changes in activity reflect changes that can be traced in video production activities, particularly in spontaneous recordings by novice videographers (Beaty, 2005). With modern video

cameras, the choice of words, subjects, positions in relation to subjects, and techniques for recording—even distorting—subjects become data for studying on-going, untraditional (and therefore less academic) school activities in infinite detail. This paper represents the first effort to focus on concept development in this context.

The video comes from a study of three high-school video-production programs that were diverse along several dimensions. Boarding High, where this video was produced, was a boarding high school for Native Americans, described by one teacher as the "last chance" for its students. The students came from reservations and non-reservation urban and rural homes throughout western United States. The video program was one of three five-session programs run by a local digital arts group and college interns, who were art majors. The program was arranged through an art teacher, who had transformed the schools art department from one focused on native crafts to one that taught a broader yet more Western version of fine arts. I attended all but one of the 15 sessions making up three separate sequences and received permissions to copy the edited and unedited work of two groups. I also conducted short interviews of several students and had Wicket and Jerome individually narrate their entire body of work. The untitled, edited, art project lasted exactly 59.1 seconds. Their unedited work lasted 887.85 seconds or just under 15 minutes and contained 34 cademes. It was recorded in two days, one week apart. Wicket and Jerome were the only students from that session to use two days to complete their recording. Wicket, who was 16, was the only youth I interviewed who identified his tribal affiliation, which was Zuni. Jerome simply said that he was Native American and that he was 15 years old. Both identified themselves as

freshmen at the school.

The Video

The video itself consists of five *edemes,* which are uninterrupted shots created during the editing process (Worth & Adair, 1972, p. 89). Of these five, two edemes are of the same subject, were made from the same cademe, and are repeated multiple times so that the subject begins and ends the piece. Refer to Illustrations 1 through 5 for still shots from each. The first viewing of the digital art piece does not reveal its meaning, and the aesthetic quality is questionable as the camera shakes, the zooms are quick, and the transitions are abrupt. The effect can be a little dizzying. But as we examine the cademes from which these edemes were constructed as well as some other cademes, the meaning and symbolic value of these images becomes evident.

Illustration 1: The camera briefly zooms in on the poster in Edeme 1, lasting slightly more than one half a second and occurring twice in quick succession.

Illustration 2: Edeme 2 zooms in and out twice before zooming in a third time. It is repeated twice and two more times at the end of the piece.

Illustration 3: Cademe 3 shows the church across the street. It zooms in on the churct and shifts left, right, up, and down to show focus on different parts of the building.

Illustration 4: Cademe 4 zooms in and out on an antenae on the roof of the school.

Illustration 5: Cademe 5 shows a helicopter as it disappears behind a tree. The camera continues searching for the helicopter.

Jesus

The most revealing cademe is that which contains the first and second edemes. The subject is a poster with a distorted image of a bearded man, who it interpreted by Wicket as “Jesus.” The edemes are revealed as signs most clearly because of the way in which

the image was initially embedded in a series of events, which in and of themselves reveal a particular relationship with school. The removal of the image from its context and the deletion of the sound track demonstrates an act of generalization that defines concepts for Vygotsky (2004c). The image is then used with a number of superficially unrelated images—with some exception of the church. The meanings become clear when they are viewed as part of their original context.

The cademe was the sixth one that Wicket shot on his first day of recording. It lasts 120.23 seconds. A description and still images from the cademe follows:

> Wicket points the camera into a classroom while Jerome talks with a female student about what they are doing. Wicket records a young woman who is extending her middle finger toward the camera. As Wicket turns the camera toward the young woman who is speaking with Jerome, she says, "Don't!" as she smiles and covers her face. Wicket says, "We took a picture of [student name] already." There is some shifting of the camera before Wicket says, "Hey, do you know where [name] is?" She answers, "Uh, she's uhm... She's up at [inaudible], but she might be in the bathroom." Wicket says, "Oh, then never mind." He turns the camera from her to a closing door. He then returns to the student who was gesturing toward the camera. Wicket turns the camera again, and the student who was speaking with Jerome tries to hide her face and laughs. She says, 'Put it away! Put it away!'
>
> A teacher comes toward them and becomes the focus. He says, "Let's

get some [inaudible] up here. What's up fellas?' The teacher motions for them to follow and walks away from the camera. Jerome says, "We got the guitar players. We got the piano." The teacher stops walking and says, "Oh, you all got 'em already?" Wicket says, "Yeah." The teacher says, "Well, get this right here. Check this out. You got sound on there?" Wicket says, "Yeah." The teacher says, "Check this out." The man slaps his face and then his knees and moves almost out of the frame as he performs. The man makes his last beat and finishes with a "Hey." The man lowers his hands and turns to leave. The man walks away, looking back over his shoulder with a smile. The people around him respond to his performance.

Wicket says, "That was only a one time thing, and I recorded it," as he moves on down the hallway. A male student walks toward them. Wicket says, "Hey, Mexicano [said, Mehicana]." The student comes out the door, motions with both arms before placing his hands on his headphones to lift them away from ears. He says, "Hey, you," before disappearing from the frame.

The camera turns toward a little room off the hallway where a male student is playing a guitar. Jerome is heard saying, "Runaway. Runaway." Wicket says, "Yo, play a song for us, dude!" The student raises his hand and extends his middle finger. He says, "Fuck you guys!" Wicket says, "Hey!" The student begins to play the guitar. Wicket continues, "Don't say that, you stupid! Play a song for us." Wicket zooms in on him playing.

Jerome says, “Play Bon Jovi.” Wicket says, “Play Bon Jovi,” with a laugh. Jerome says, “Hey, Zuni, get a picture of this. Zuni.” Wicket says, “Wait up.” The student stops playing then and says. “There you go. This is like hot [inaudible], but I don't want to play the whole thing.” Wicket says, “Ohh, you suck, man!” Jerome says, “Hey, picture this, dude. It's tripped out.” Wicket turns the camera to a poster of a Jesus-like man with multiple images surrounding a central face. Jerome says, “Check it out.” Wicket says, “Tripped out Jesus, man!” Wicket zooms in and out on the poster. Wicket says, “Tripped out Jesus. Check it out. Jesus is looking at you. Fear Jesus.” Wicket is heard laughing. He continues laughing. Jerome says, “Hey, the camera, man.” Wicket says [reluctantly], “All right.”

Illustration 6: In Wicket's sixth cademe, a student attempts to hide from the camera.

Illustration 7: In Wicket's sixth cademe, a teacher performs for the camera.

Illustration 9: In Wicket's sixth cademe, he convinces a student to play for the camera.

Illustration 8: The same student from the previous illustration is shown playing guitar in an extreme close up.

The significance of these events is first to demonstrate how embedded the image of “Jesus” is. It was found in the process of exploration and became a silly part of silly adolescent play. Second, the other events within the cademe reveal typical high school student behaviors: looking for friends, teasing friends, and an intense interest in music. It is remarkable because of the connection made with a teacher. The fact is that this is the only teacher or staff member that becomes the focus of the camera in a respectful way. All the other teachers are immediately cut from the scene or are mocked in some way. This event is important. The third significance is the original audio track. Jerome was eager to point out the poster to Wicket, and then Wicket focused on the poster, saying, "Tripped out Jesus. Check it out. Jesus is looking at you. Fear Jesus." His interpretation of the poster as Jesus was probably intentional, but his response to image tells us why it was included in the edit. Jesus is an authority who has them under surveillance.

The Church

Edeme 3 is of the church. Jerome recorded these images, but both youth were again involved in making its significance clear. Again, the other events of the cademe are important in interpreting their relationship with school. It was Jerome's 16th shot of the first day, and it lasted 41.23 seconds. A description and illustrations follow:

> Jerome shows a restaurant diagonally across an intersection from the school. He says, “The easiest place you can go is the restaurant right there.” The camera turns toward a building on the campus. Wicket begins to say something but is cut off. Jerome says, "For the hon..." He stumbles with his words. Jerome continues, "...honor students. Smart ass motherfuckers anyways." Wicket says, "We're not smart. Cause we're stupid! We're still in Art 1." He laughs. Other buildings and satellite dishes are shown. Wicket says, "Yo yo yo, check this out." Jerome makes a sound that might have indicated to wait a moment or that he was complying. The camera turns from the street on one side to the street on another side—the front—of the school grounds. A church across the street from the school is shown. Wicket says, "Go . . . right there." Jerome says, "The church!" Wicket says, "The church. Everything..." Jerome interrupts him to say, "The church from hell." Wicket says, "Yep, they cru . . ." Jerome interrupts him to say, "Evil! Evil!" Wicket says, "They crucify you if you don't believe in the church. But that was in England times. Now we're in 2001 . . . 2002!"

Jerome interrupted to say, "2!" just as Wicket was correcting himself.

Illustration 10: The restaurant that Jerome speaks about at the beginning of his 16th cademe.

Illustration 11: The honors dorm from Jerome's 16th cademe.

Again, the edeme is a small portion of cademe and is embedded in a series of events, this time being a part of an overview of the territory of and around the campus. The church was not a part of the school, but its use demonstrates a tension with the dominant culture that governs the school. Jerome and Wicket reflect on who they are: They are not “smart motherfuckers” and they or their ancestors have been “crucified” by the church. They bring the issue of authority in through the simple connections they happen upon, but in removing one symbol of Christianity and pairing it with another in the utterance of the finished project, they demonstrate that these are signs. Their words, which they edited out, clarify the meaning of these signs for these particular youth. It should be noted that during Wicket's narration of his work, given only in my presence and therefore undertaken with a clear intent of presenting something to me, he talked

about not being Christian. Similarly, I found a webpage devoted to a lament that the school presents a Christian version of Native ceremonies rather than presenting the diversity of beliefs originally found in Native practices. Christianity for them is about the authority of colonization.

Antennae And Helicopters

The remaining two edemes were not embedded in lengthy or complicated cademes. There was little else in the cademes but what appeared in the final edit. But the cademes still reveal a great deal. What do antennae and helicopters have to do with religious symbols? First, I present the antenna. Wicket recorded 27.50 seconds on his second day of recording. It was his 5th cademe of the day. A description follows:

> The top of the school building is shown with an antenna sticking up from the roof. Jerome says, ". . . some shit. That antenna right there." Wicket zooms in and out on the antenna. Wicket says, "There's the antenna." Jerome, speaking at the same time, says, "That's for all the satellites and shit." Wicket says, "Antenna, the antenna. Nobody knows what it's used for, but we're still trying to find out." Jerome says, "We're going to destroy it." Wicket adds, "We're going to destroy it." Jerome says, "[Wicket] will." Wicket laughs, "I'm not," while Jerome says, "[inaudible] will."
>
> Wicket turns the camera to another roof. Another antenna is shown. Wicket says, "And here's another antenna." Jerome says, "That's for the radio, you fucking crack head." Wicket says, "Oh, but this antenna," as he

> laughs and turns the camera back to the first antenna, “[inaudible] not know what it's used for."

Their words reveal that there is a mystery of sorts in this antenna and that they perceive a sufficient threat from it to imagine destroying it. They are only joking, of course, but there is nevertheless meaning in what they say. Does it represent possible surveillance? Or is more to do with a threat from technology? At some point in our conversations, Wicket spoke about the shock of coming to school and seeing so much pavement. In his narrations, he said that he filmed the antenna because of the mystery but did not explain why it was put in the final piece. It is clear that there is some symbolic threat in this antenna—referred to as a satellite in part of Wicket's narration—and I see the youth as making a connection between this and the other images.

The final edeme was created from the cademe recorded by Wicket on the second day. It was his second shot, lasting only 18.37 seconds, and was another example of a something discovered while wandering.

> A helicopter flies overhead. From a distance, Jerome asks, "What flower is that? I don't even know where they're at." Wicket does not respond but seems to look for the helicopter beyond the tree. Jerome calls, "Hey, bitch! [Wicket]! I don't know where the fuck the flowers are at." Wicket answers, "Me either." Wicket calls, "Where'd the helicopter go?!"

This cademe shows a clear disconnect between the images and he audio. Jerome and Wicket are disconnected, but the cademe was transformed into an edeme and used. One interesting aspect of this edeme is that he left the search for the helicopter was left in it.

In his narration, Wicket said that he likes things that fly because “We were never meant to fly.” He did not offer any explanation for why it was selected for their digital art project.

Talking And Communication

When asked what the “purpose” of their project was, Jerome answered that they were just messing around. Wicket said something very different. He said that the message was, “Don't judge others.” This is consistent with what I see as a message concerning authority and surveillance but also seems—along with other very noncommittal statements—to suggest that there is a limit to the students' use of concepts if they cannot explicitly speak about them. I would argue, however, that their inability to speak more explicitly about it does not indicate a deficiency in their thinking. First, another group of students had placed an edeme showing “A.I.M.” (American Indian Movement) written on the wall followed by an edeme of red paint spilled on the ground. When asked about it in a class viewing, the students were unable to say anything about the meaning of this video. This lack of speech reflects many of my interactions with the students at this school that finally became understandable as I repeatedly viewed Wicket and Jerome's cademes: They never spoke at length in front of an adult and rarely recorded adults. Yet when they were with peers, their speech became something very like that I have witnessed from other youth. In fact, there was often an abrupt switch between boisterous joking and a quiet seriousness. In short, they do not seem to be in the habit of speaking explicitly or otherwise about their thoughts, paraticularly with

adults. The stronger evidence that my interpretation is correct, however, comes from an examination of the rest of their cademes.

Other Cademes

The fifteen minutes worth of video shot by Wicket and Jerome contains a diversity of subjects, places, and moods, yet a theme of authority emerges repeatedly. One cademe that says it most clearly is the following one recorded by Wicket on the second day of recording:

> Wicket yells, "him," as a student is seen running through the central quad. He yells, "He's on the run!" The student gestures with his middle finger. Wicket yells, "He's running! Who are you running from?" The student runs behind a wall. He bends over to catch his breath, looks over his shoulder, and answers, "Security." Wicket says, "He's running from security." The student whispers, "Fuck you," and extends his middle finger again. The camera turns toward the quad and the area beyond it. Wicket says, "Oh, man. Oh, there's the security!" He looks for them with the camera until they're in view. Two men walk beneath the trees on the other side of the quad. Jerome asks, "Where they at?" Wicket answers, "They're over there." He shows the security on the camera. Wicket almost sings, "Security." Wicket says, "Osh. Here they come. They're looking this way." The "runaway" student is shown again. Wicket says, "Here's a runaway slave . . . against those bozos . . ." The camera searches for the two men.

Wicket continues, ". . . right there." Wicket says, "This is live! This guy just ran from security, and he's from Choice Dorm [said, Choy Store, it seems]." Jerome asks (barely audible), "Are you recording?" Wicket answers while laughing, "Yeah."

Illustration 13: The running student that Wicket talks to during

Illustration 12: The "security" that Wicket looks for, finds, and zooms in on.

It is a remarkable and playful video. In it, Wicket makes one aspect of his and others' existence at the school very explicit: They are like slaves. Additionally, he takes the position of a news reporter, documenting an unfolding event as if it would be of interest to the world. This discovery of an act of defiance in the making is newsworthy. At the same time, Wicket becomes a threat to the student and necessitates further acts of defiance—the one made repeatedly by students at this school—that of extending a middle finger toward the camera. The question of who is subject to whom arises routinely, and symbolic defiance occurs repeatedly.

A set of examples arise in Wicket and Jerome's visits to the "OCS," on-campus

suspension classroom, which occurs three times, and though it is next to the art classroom, there is a clear joy that they take in taunting the students there. In one of these visits, a staff member came to chase them off and becomes the focus of the camera for a brief moment before being cut out of the frame. Wicket said during his narration, “He's getting mad cause our instructor don't see us [?]. I think he don't like me cause I kind of get on his last nerve and ev . . . start riots in OCS and he . . . he's out to get me. He started pointing at me and saying, ‘I’m going to get you. I'm going to get you one of these days.’ So I’m . . . I’m watching all the time. Freaking out.” The staff member represents the expected treatment of students and the students’ response.

In similar cademe that is recorded by Jerome, the school security is shown through the glass while Jerome and Wicket mock them:

> Wicket yells, "Stop us!" Jerome says, "Trying to bust somebody." Wicket yells, "Stop us!" again. Wicket yells, "We have no pass." Jerome says at the same time , "Stop the hate crimes!”

Yet, when they entered the building and came face to face with the security, their tone immediately became polite and then Jerome stopped recording. The next cademe was a short and silent scene of people walking in the hallway. The shift in tone is dramatic and suggests a temporary loss of voice—a loss of agency—as they confronted representatives of the school’s authority.

One last characteristic that seems meaningful: Wicket and Jerome's cademes are full of people, yet their art has none. This in and of it self demonstrates a generalization —a removal from the concrete. Even in the moments when they recorded artwork on the

wall, they brought them to life through their camera work and speech. One of the more artistic moments was Wicket's spontaneous poem while recording rose petals on the ground:

Roses are dead.

And violets [or violence?] are blue.

What the hell is wrong with you?

Authority And Surveillance

Wicket and Jerome's project was dominated by playfulness, but these were accompanied by moments of seriousness that seemed to reflect respect and interest. During the play, a theme of authority as a repressive force emerges in disconnected, spontaneous moments. Some of this was circumstantial: The art classroom was next door to the "on-campus suspension" room, thus they visited the room to tease fellow students and indirectly comment upon the situation. In one shot, Wicket stumbled upon a fellow student who was fleeing "security." Like these, the images that were transformed into edemes were mostly found along the way. Yet the theme of authority runs throughout, sometimes only becoming apparent in the words Wicket or Jerome used. The cademes that were selected were objects with iconic value. They were removed from their contexts, distorted by the zooming, and edited into a coherent piece with a vague but consistent message. Videos from the next course were prettier—they had more striking images—but none of them had this consistency. Additionally, I suspected that must of the composing in the third session was done by the interns rather than the students. Wicket and Jerome's project

was less aesthetically pleasing, but they truly recorded and composed it by themselves and created something with far more meaning and consistency than any of the others. This combination permits an analysis that follows the progression of the theme that remains unnamed—like the project—but that can be summed up as "authority" or "surveillance."

Recognizing Concept Development

It is in the editing process that "thinking in the true sense" as an "intervention of will in a representation" (Vygostsky, 2004b, p. 368) becomes evident. The process of editing allows—promotes—the reflection and systematization that leads to concept development. It is when the image is removed from its context and turned into a sign that represents a concept.

> The concept . . . arises as a result of rational processing of representations as a result of disclosing connections and relations of the given object with others and, consequently, it includes a long process of thinking and cognition that is seemingly concentrated in it (Vygotsky, 2004a, p. 443).

It is particularly in the cademe of "Jesus," which was transformed into two different edemes and used six times, that demonstrates how one image is used to represent the topic, but in aligning it with the other images, the process of connecting different materializations of a concept in a willful manner becomes apparent.

Vygotsky's approach to concept formation contains three characteristics that are visible in this video. First, a concept is a process rather than a product (2004a).

Therefore, it is not something an individual can *have*; it is something that one *does*. Wicket and Jerome engaged with some notion of authority in many contexts—both directly and indirectly: Their repeated entries to the room where students were in suspension was mostly about circumstance and wanting to see friends, but it repeatedly raised the issue of authority. A short shot of two security guards through a glass wall afforded flippant remarks about authority. The camera provided an authority with which Wicket and Jerome censured and teased other students. A teacher demanded to see their hall pass and was quickly cut from view. Wicket and Jerome repeatedly mocked, emphasized, turned the camera away from, or described a history of authority. These actions, regardless of how often they represent "true" concepts, demonstrate a way of thinking—a way of acting—rather than an idea that one acquires in a moment and forever after owns. Particularly against the backdrop of who and where these adolescents are and their explicit references to these during cademes, Wicket and Jerome embody the latest struggle against the authortiy of colonialization at a school that seems to support their Native identity but with ambivalence.

The second characteristic of concept formation that is present is the process of making connections and relations. This is about seeing differences and similarities. Wicket and Jerome's cademes create a series of disconnected moments that they randomly connect by recording and from which they drew to make a meaningful connection in the editing process, thus providing the strongest evidence of thinking conceptually. Vygotsky argued that development involves movement from thinking in complexes to pseudoconcepts to true concepts (1994) with all forms remaining a part of

one's thinking (2004a). The ways in which Wicket and Jerome engage with the theme of authority took many forms, culminating in an unspoken but coherent presentation. Thesimple, uncommented upon cademe of the helicopter, for instance, became rich in meaning only when seen as part of the utterance of the edited art project.

The third characteristic of a concept is that it is "a complex merging of abstract and concrete thinking" (Vygotsky, 2004a, p. 456). Vygotsky elaborate:

> If we assume that an object is disclosed in connections and mediations, in relations with the rest of reality and in motion, we must conclude that thinking that has concepts at its disposal begins to master the essence of the object and discloses its connections and relations with the other object and begins for the first time to combine and correlate various elements of experience, and then the complicated and comprehended picture of the world as a whole is disclosed. (2004a, p. 467)

Authority makes an appearance in multiple concrete objects and events that, by being connected and presented without narrative, become abstract symbols. This is a process of generalizing—a process of thinking conceptually.

Adolescent Development

Vygotsky argued that all the major changes in adolescence are about the changes in how an adolescent thinks: "Understanding reality, understanding others, and understanding oneself—this is what thinking in concepts brings with itself" (2004a, p. 436). Wicket and Jerome's project demonstrates how other adolescent characteristics are part of concept

development. The endless negotiations with authorities and peers over the social structure reflects this. Another aspect is how youth engage their personalities in what they do. Vygotsky claimed that self-consciousness is only capable with concepts, and Wicket and Jerome continually display this. Examples include the display of the "honors dorm" that is accompanied by Jerome's comment, "Smart mother fuckers anyway," and Wicket's addition, "We're not smart. We're in art one!" and another shot in which Jerome shows a mural and says teasingly, "It's from your tribe! [Zuni]" while Wicket repeatedly says that it's a Hopi icon. In small ways like these, *they* are very much a part of the events in the cademes, becoming less visible in the edited piece as they consciously present *art*. Unlike many of the other videos from this project, neither Wicket nor Jerome ever appear in the video, but I learned more about whom they were from their video than any other student.

Vygotsky also discussed the poetic expression of more advanced thinking that frequently occurs in adolescence: "Where [the adolescent] must be a thinker, he [or she] poetizes, and where he [or she] performs as a poet, he [or she] philosophizes" (Vygotsky, 2004a, p.464). Wicket creates poetry. He gives voice to posters on the wall. Similarly, there is frequent interpretation of the world around them. They bring up the history of the Church and the effects of security. Art and philosophy are woven throughout the cademes as they embrace the world in jest and in earnest.

Lastly, agency or "will" has been found to be a central part of development in video projects (Beaty, 2001; 2003; 2005). Agency, in my usage, refers to the overt

efforts made by students to assert meaning through their videography. Some students recorded events without asserting influence on the actual events or how they were seen. Other students distorted, inserted, scripted, and otherwise asserted their will on events. Wicket distorted the objects and people around him with his frequent and quick zooming, encouraging Jerome to imitate him. They both shaped every event they recorded in either overt of symbolic ways, distinguishing their cademes from all the others obtained for analysis. Vygotsky did not specify agency as part of adolescence specifically, but he frequently discussed it as central to higher order thinking. Its connection to the editing process is clear: “Nowhere does the will create, but it always only changes and selects” (Vygotsky, 2004c, p. 368), which could easily be a description of the editing process.

In conclusion, Wicket and Jerome have provided an excellent example of concept development in their play with the concept of authority. Their videography was a distributed process in which they feed off of one another and everything around them as their activity within the school changes. They were engaged in their video production as Native American youth who are at risk of failure and disciplinary action, who appreciate music, art, and humor, who embraced and disrupted their peer world, and who demonstrate a world view that is shaped by their awkward position in society. They transform the material world: The youth merge the material and meaningful planes in their cademes and transform the images of their normal environment into signs in the process of editing their final project. The analysis of their video may open the way to similar analyses and refinements of a novel methodology. It clearly supports a

Vygotskian model of development.

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