### Student Showcase Journal

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## Student Showcase Journal



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### Acknowledgements

Thank you to everyone who contributed their time and effort to making the 1999 Student Showcase Conference, the Awards Reception, and the Showcase Journal a success.

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### About the Student Showcase Program

The UAA Student Showcase Academic Conference, Award Ceremony, and Journal publication have been in existence for fourteen years. Dr. Sharon K. Araji, UAA Sociology Professor, founded Student Showcase in 1985. The conference still remains the only one in the State of Alaska where students present original papers and projects. The Student Showcase Committee reviews policies and procedures, promotional material, and selects the award winners.

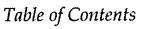
Each year Student Showcase creates the opportunity for dialogue among university and community members. Students submit their best work for evaluation by objective faculty members from their discipline; selected works are presented at the conference; and distinguished community members are invited to the conference to evaluate, critique and comment on the student works. The very best papers and projects are published in the Student Showcase Journal.

This past year students from Kodiak, Soldotna, Palmer, Wasilla, as well as Anchorage participated at the conference held on March 28, 1998. From the seventy-two entries submitted, forty-five were presented at the academic conference, and thirteen were selected as Showcase award recipients. The award winners attended the Student Showcase Awards Reception where they were presented with an engraved paperweight and cash award. The award recipients were then invited to have their work published in the 1998 Student Showcase Journal.

The UAA Student Showcase Program is designed to highlight the extraordinary work of students throughout the University of Alaska Anchorage system. It is with great pride that we present the 1998 Student Showcase Journal.

Carole L. Lund, Chair
UAA Student Showcase Committee

Selections for the UAA Student Showcase Journal were taken from award winning papers and projects presented at the fifteenth annual Student Showcase Academic Conference held on March 27, 1999. Papers published in the journal were edited in accordance with the Publication Manual of the American Psychological Association, 4th edition; the MLA Handbook, 4th edition; and the Chicago Manual of Style, 14th edition. The journal was printed at a cost of \$2.92 per copy. The contents of this Journal are available on CD ROM.





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### Intertextuality in Auster's The New York Trilogy



Postmodernism is the principal literary movement of the second half of the twentieth century. Literature, written during this time period, tends to reflect the postmodern style, which has several emerging characteristics. One of the main characteristics of the postmodern style is intertextuality. Briefly explained, intertextuality is the idea that all texts exist in a timeless field wherein they relate to and influence each other in all directions (Linton 10/7/98). In addition to this general definition, intertextuality can be discussed in more specific terms. Three main types of inter-textuality include the following: intertextuality that arises from a dialogue between two specific works, intertextuality of subjectivity, and intertextuality that arises from a dialogue between a specific work and a movement, genre, zeitgeist, or canon (Linton 10/21/98). Each of these three specific types of intertextuality can be easily identified in Paul Auster's contemporary novel The New York Trilogy, which is actually three short texts, entitled "City of Glass," "Ghosts," and "The Locked Room." As the narrator of Auster's first story, "City of Glass," explains, "What interested him about the stories he wrote was not their relation to the world but their relation to other stories" (8). The position of this statement at the beginning of the first text signifies the strong emphasis that is placed on intertextuality

throughout this piece. The purpose of this paper is to explain the general concept of intertexuality and the three types that were briefly explained above. The types of intertextuality will then be investigated in <a href="The New York Trilogy">The New York Trilogy</a>. The explanation of intertextuality and its identification in <a href="The New York Trilogy">The New York Trilogy</a> should lead to a better understanding of one of the main emerging characteristics of the postmodern period.

In order to better explain intertextuality, it is necessary to discuss Roland Barthes' definition of a text, which is one of the foundations for intertextual theory. Barthes posits that the text is plural and that it accomplishes a plurality of meaning. He elucidates that "the text is a process of demonstration" that "only exists in the movement of a discourse" (1006-7). For Barthes, "the Text is experienced only in an activity of production" and can be understood by the words "play, activity, production, practice" (1007, 1009). Once Barthes establishes the definition of a text, he discusses the ways in which texts produce meaning. Barthes states that meaning is produced in the interaction between the reader and the text. He elaborates on this idea in the following:

the Text requires that one try to abolish . . . the distance between writing and reading, in no way by intensifying the projection of the reader into the work but by joining them in a single signifying practice (1009).

It is through this type of interaction between the reader and the text that Barthes derives his concept of meaning: "the Text is not a co-existence of meanings but a passage, an overcrossing; thus it answers not to an interpretation, even a liberal one, but to an explosion, a dissemination" (1007). Barthes' definition of a text is one of the origins of intertextual theory.

During the time that Barthes was writing textual theory, Julia Kristeva, a Bulgarian literary theorist, coined the term intertextuality. Kristeva states that intertextuality presumes that each text refers primarily to other texts rather than to external reality (Linton). She further construes this idea in the following: "any text is constructed as a mosaic of quotations; any text is the absorption and transformation of another text" (Kristeva 37). In <u>Teaching the Postmodern</u>, Brenda K. Marshall offers a definitive quotation that effectively summarizes the meaning of intertextuality. Marshall proposes:

Intertextuality is precisely a momentary compendium of everything that has come before and is now. Intertextuality calls attention to prior texts in the sense that it acknowledges that no text can have meaning without those prior texts; it is a space where meanings intersect.

There is no such creature as the autonomous text (or work) (128).

When understanding intertextuality, it is imperative that one does not misconstrue the textual threads that run through a piece as being textual sources or influences. Jonathan Culler illuminates this idea by explaining that intertextuality is more concerned with considering prior texts as contributors to a code, which exemplify the possibilities for the culture in which it was written. Culler states: "Intertextuality thus becomes less a name for a work's relation to particular prior texts than a designation of its participation in the discursive space of a culture" (103). In order to clarify the explanation of intertextuality, it is necessary to apply this term to a piece of postmodern literature.

The first main type of intertextuality that will be discussed in relation to The New York Trilogy is that which arises from a dialogue between two specific works. This type of intertextuality falls under the general explanation previously discussed and is also further expounded upon by Jacques Derrida in his work Of Grammatology. In this piece, Derrida explains that

there is nothing outside of the text... there has never been anything but writing; there has never been anything but supplements, substitutive significations which could only come forth in a chain of differential references (158-59, 172-73).

This type of intertextuality is especially interesting to explore in relation to The New York Trilogy because the structure of this novel supports intertextuality between the three stories as one entity and other texts and also intertextuality between the three individual texts that comprise the trilogy. Because, as Marshall states, "there is no limit to the texts within any one novel," the best way to approach The New York Trilogy is to explore one dominant example of intertextuality between it and another work and then to mention briefly some of the examples of intertextuality that exist between the three individual texts that comprise the trilogy (137).

The first textual thread that will be discussed appears in the first book of the trilogy, "City of Glass," and relates to <u>Don Quixote</u>, written by Miguel de Cervantes Saavedra. Although there are a prodigious number of textual references throughout this story, <u>Don Quixote</u> is an important one to investigate because of the way it sets up a discursive space, which allows for the creation of relevant and significant interpretations. In chapter ten of "City of Glass," the protagonist, Daniel Quinn, engages in a lengthy conversation with another writer, Paul Auster, about <u>Don Quixote</u>. Throughout this

conversation, several statements are made that the reader interprets as being relevant to the overall meaning of <u>City of Glass</u>. An example of one of these statements is the following:

Still, I've always suspected that Cervantes devoured those old romances. You can't hate something so violently unless a part of you also loves it. In some sense, Don Quixote was just a stand-in for himself" (117).

After reading this passage, the reader sees connections between these comments on <u>Don Quixote</u> and "City of Glass." Specifically, this statement is a comment on Cervantes writing himself into the text, which is, in fact, exactly what Paul Auster is doing by including a character with his same name and profession in the story. The fact that the two characters engaged in this conversation are discussing a topic relevant to <u>Don Quixote</u> and <u>The New York Trilogy</u> sets up a discursive network between the two texts. The link that is forged between these two texts expands the possibility that interpretations in the "City of Glass" could also be similar to those provoked by <u>Don Quixote</u>. In a way, these two texts now share the same discursive space, which wholly influences the meanings that can be derived from the texts.

Another interesting form of intertextuality that is found in The New York Trilogy is woven between the three individual texts that comprise the trilogy. An exhaustive account of these textual threads is beyond the scope of this paper; therefore, one particular example will be presented. This textual thread relates to color names and is seen first in "City of Glass" when the young Peter Stillman is speaking to Quinn and says the following: "I am Peter Stillman. That is not my real name. My real name is Peter Rabbit. In the winter I am Mr. White, in the summer I am Mr. Green" (21). When this passage is first read, it seems that the references to color names are arbitrary and can be attributed to Peter Stillman's thwarted linguistic development. This textual thread is then continued as the principal names of the characters in the second story, "Ghosts." This story begins with a brief history of the characters, all of whom have color names: "First of all there is Blue. Later there is White, and then there is Black, and before the beginning there is Brown" (161). A color name is also used in the last story, "The Locked Room," in the name of the editor to whom the narrator delivers Fanshawe's work, Stuart Green. Intertextuality between the three stories in the trilogy has a significant impact on the reader, because it reinforces the notion that interpretation is a process that takes place between the reader and the text. This type of intertextuality presents itself to all readers of the trilogy, unlike the literary references, which would

only be familiar to readers with relevant literary experience. This thread between the texts helps to effectively weave all three stories together in a way that promotes the production of similar interpretations.

The second main type of intertextuality that is found in <u>The New York Trilogy</u> is intertextuality of subjectivity. This form is different from the first type of intertextuality because it specifically involves the author as a character in the text and the relation between texts that this phenomenon creates. Barthes explains this concept in the following:

It is not that the Author may not "come back" in his text, but he then does so as a "guest." If he is a novelist, he is inscribed in the novel like one of his characters, figured in the carpet; no longer privileged . . . his life is no longer the origin of his fictions but a fiction contributing to his work; there is a reversion of the work on to the life . . . the I which writes the text, it too, is never more than a paper-I (1009).

A work, in which the author enters the story as a character, is seen as having textual threads in two different realms. Marshall further explains this concept when she states that intertextuality of subjectivity "makes the point that this particular text is both controlled and not controlled by an 'other', and that 'other' is itself a text" (134). Intertextuality of subjectivity is prevalently seen in the first story of The New York Trilogy, "City of Glass." The first point to address in relation to this concept is that Paul Auster is the author of each of the individual stories. In "City of Glass," there are two ways in which he enters the text of the story: imitated by another character and realized as a legitimate character. The first time that Auster enters the world of the text is through the mention of his name in an incorrectly dialed phone call. This mention provokes the protagonist, Quinn, to take on the identity of Auster in order to pursue a detective case. Ouinn reflects on his new identity in the following:

The first was to tell himself that he was no longer Daniel Quinn. He was Paul Auster now, and with each step he took he tried to fit more comfortably into the strictures of that transformation. Auster was no more than a name to him, a husk without content (75).

This description of Auster relates to both Quinn's and the reader's understanding of Auster. At the time that Quinn takes on Auster's identity, both the reader and Quinn know nothing about him. In actuality, this first representation of Auster is an incomplete exam-

ple of intertextuality of subjectivity because only the idea of the author is being evoked, not the actual author. This example is worth mentioning because it is the beginning of the connection between Auster and the text that becomes realized later in the story.

Auster is introduced as an actual character in the text when Quinn realizes that he needs additional help in solving the case and stops impersonating Auster in order to actively seek his assistance. The Auster whom he meets is not the private detective he expected to encounter, but rather a writer much like himself. The actual character, Paul Auster, is an intriguing example of intertextuality of subjectivity because the reader can never completely know if this character can be accurately interpreted as a model of the historical author, Paul Auster. However, the fact that the same name is used can be seen as the use of a text that has subjective references in both the literary and worldly realms. One part of the story that supports the idea that the character is a reflection of the author is that the unidentified narrator explains that she or he heard about this story through the character. In this sense, Paul Auster can be understood as functioning as a liaison between these two realms. He is experiencing the story within the literary realm, reconstructing it for another character in the story who is the narrator, and then reporting it to the reader through his writing of the story from the worldly realm. Once Auster's entangled involvement within this text is understood, it is clear that even if the character is not an exact model of the real-life author, the name, which is a text that references these multifarious levels of subjectivity, is clearly interacting with several textual realms. This type of subjective interaction is what postmodern theorists call intertextuality of subjectivity.

The last type of intertextuality that will be explored in relation to this text is intertextuality that arises from a dialogue between a specific work and a movement, genre, zeitgeist, or canon. A common feature of the intertextuality of postmodern works is that they will invite a certain interpretation based on an evocation of a certain genre, zeitgeist, or canon. Linda Hutcheon explains this occurrence in relation to the canon when she states, "Postmodernism signals its dependence by its use of the canon, but reveals its rebellion through its ironic abuse of it" (130). The New York Trilogy displays this type of intertextuality in relation to the genre of the detective novel. In the beginning of the story, the narrator seems to be evoking the detective genre through several of the statements that are presented to the reader. The first of these statements explicitly discusses the expectations for detective novels and seems to be offering advice for the way in which this story, as a text in the detective genre, should

be read. This passage states, "In a good mystery there is nothing wasted, no sentence, no word that is not significant. And even if it is not significant, it has the potential to be so—which amounts to the same thing" (9). Additional support for the status of this book as a detective novel is offered later in the first story when Quinn's theory about investigative work is explained:

He had always imagined that the key to good detective work was a close observation of details. The more accurate the scrutiny, the more successful the results. The implication was that human behavior could be understood (80).

Like the previous passage, this one can be interpreted as advice for how to solve the mysteries presented in this story. The reader is further invited to interpret this work as a piece of detective fiction because of its emphasis on private detectives and detective stories. One of the main themes that runs through each of the individual stories in the trilogy is the theme of unsolved mysteries or unexplained occurrences and the struggle of the private detectives who are trying to solve these cases. This emphasis on the detective novel invites the reader to interpret this text with expectations that she would normally apply to the detective genre.

There are several expectations that readers have for detective fiction. Three of these expectations are a satisfying conclusion to the story, a final reassurance of social norms, and a sense of certainty in the solution that was provided (Linton 10/21/98). Although The New York Trilogy effectively evokes the detective genre, it also resists fulfilling each of the necessary expectations of this genre. For example, none of the three stories offer a concrete conclusion to the events. All three stories resist a reinstatement or a reinforcement of social norms. And each story refuses to offer a solution to the problems that have been presented. In that The New York Trilogy effectively resists fulfilling the expectations of the detective genre, it is creating a dialogue between the text and the genre.

The fact that this text is resisting the genre it superficially evokes is further supported by several comments on the status of knowledge. Throughout the text, there is a sampling of passages that question the authority of knowledge. During a moment of frustration, Quinn states, "There was no way to know: not this, not anything" (68). In the second story, Blue is reviewing the case on which he is working and determines that "He has learned a thousand facts, but the only thing they have taught him is that he knows nothing" (202-3). The third story offers some insight into knowledge when Fanshawe's book is being discussed in the following: "The

book was a work of fiction. Even though it was based on facts, it could tell nothing but lies" (291). A summarizing belief in the status of knowledge is offered at the end of the text when Fanshawe states, "You can't possibly know what's true or not true. You'll never know" (368). These randomly placed passages offer insight into the unattainable quality that is subscribed to knowledge and reinforce this text's resistance to the expectations of the detective novel. The way in which <a href="The New York Trilogy">The New York Trilogy</a> both evokes and resists the detective form can be viewed as an intertextual dialogue between the text and the genre.

Auster's incorporation of three main types of intertextuality in The New York Trilogy demonstrates the complexity of this postmodern concept. The relevance of intertextuality to the study of postmodern literature is paramount in that it is one of the main ways in which meaning is interpreted and even constructed. As Marshall states, "only by being intertextual, that is, already read, can something have meaning" (146). Intertextuality is also an important concept because it reinforces the notion that the reader is active and can produce the meanings in the text. According to Barthes, one of the reasons that reading postmodern literature is satisfying for the reader is because it resists the boredom that results from texts based on the product model. Barthes explains that "to be bored means that one cannot produce the text, open it out, set it going" (1009). The ability of intertextuality to support dialogue between the reader and other texts is what makes it such a stimulating characteristic of postmodern style.

### Works Cited

Auster, Paul. <u>The New York Trilogy</u>. New York: Penguin, 1990. Barthes, Roland. "From Work to Text." <u>The Critical Tradition:</u>
<u>Classic Texts and Contemporary Trends</u>. Ed. David H. Richter. Boston: Bedford, 1989. 1006-10.

Culler, Jonathan. <u>The Pursuit of Signs</u>. Ithaca: Cornell UP, 1981. Derrida, Jacques. <u>Of Grammatology</u>. Trans. Gayatri Chakravorty Spivak. Baltimore: The Johns Hopkins UP, 1976.

Hutcheon, Linda. <u>A Poetics of Postmodernism: History, Theory, Fiction</u>. New York: Routledge, 1988.

Kristeva, Julia. "Word, Dialogue and Novel." <u>The Kristeva Reader</u>. Ed. Toril Moi. New York: Columbia UP, 1986. 34-61.

Linton, Patricia. "Intertextuality Lecture." English 343 Class Meeting. Anchorage, Alaska. 7 Oct. 1998.

-- "Intertextuality Lecture." English 343 Class Meeting. Anchorage, Alaska, 21 Oct. 1998.

Marshall, Brenda K. <u>Teaching the Postmodern</u>. New York: Routledge, 1992.

### The Day the Mormons Came



The day the Mormons came, I was sitting at the kitchen table. I was alone, I was lonely, it was winter in Anchorage. It was a lonely, lonely winter afternoon. It was the beginning of two weeks of house-sitting, and the fifth month of living out of a suitcase. You'd think by then I'd have figured out how to be comfortable anywhere. But the house was cold, the bedrooms in the basement colder. I had slept fitfully that first night, fully-clothed, upstairs on the couch; one cat on my feet and one cat on my head. I had gotten up at six, made tea, battled the cats for control of the newspaper. Later, I stared at nothing, listened to the wind, paced, and watered the plants. By noon, I had opened the refrigerator a dozen times, opened all the cupboards, looking for some kind of pacifier. I settled on crunching raw spaghetti noodles. Finally, when I couldn't avoid it anymore, I sat down at the kitchen table next to the picture window, turned on my laptop, opened up my notebooks, and began to work.

It was then that I caught sight of the Mormons turning the corner off the street and walking up the driveway. In seconds they'd be coming up the stairs to the front door, and they'd be able to see me sitting there at the table while they knocked. I eased off the chair and went down on my hands and knees to get below the level of the window. I listened to them trudge up the steps. They knocked.

I waited.

They waited.

I waited.

I thought, what the hell am I doing down here? I recovered my decency and crept out from beneath the window—trying to look natural, as if I had been looking for something under the table or hutch. These were human beings, after all, and I ought to send them on their way with a well-wish. I stood up and opened the door.

The day the Mormons came, I was feeling like less than a decent and friendly human being, but I wanted to be one. And yes, I was ready to send them off with a well-wish. "I'm Elder Sauers and this is Elder Gifford," said the taller of the two. They couldn't have been older than twenty. "Have you heard of the Church of Jesus Christ of Latter-day Saints?"

"Of course, I have," I told them.

"Do you belong to a church?" asked Elder Gifford.

"I was raised Lutheran, but I don't go to church any more," I said.

"May we talk with you a bit about the Church of Jesus Christ of Latter-day Saints?"

They waited with their hands clasped comfortably before them, pleasant smiles on their faces. As we stood there on the threshold, cold house getting colder, I knew I needed to either shut them out or let them in. I glanced at the table, at the computer and papers and books waiting there, and before I knew what was happening, the angel of procrastination hatched a plan. I flung the door wide and said, "Lay it on me, boys!"

They were in.

I began clearing a space at the kitchen table, brushing cat hair off chairs. The youthful Elder Sauers started right in: "What are your beliefs about God at this time in your life?" He was handsome, very smooth and confident—I liked his smile right away.

I thought: These could be young con men casing the neighborhood, and now I've gone and let them in someone's house. This was a paranoid way of thinking that my paranoid ex-boyfriend had taught me.

"I don't believe in God," I told them. "At least not God in the Christian sense. And I'll just tell you right up front—I'm not going to join your church, but I wouldn't mind just chatting for awhile. I'll listen to anything you want to tell me."

"That's as good a place as any to start," said Elder Sauers.

"To be honest, you're the first person who's invited us in

today-it's nice to get inside."

The Elders did look red-cheeked and chilled. Why do missionaries always appear on foot, as though they walked all the way from Salt Lake City?

The cats came out of hiding and were quickly furring up the Elders' dark pant legs with white and gray hairs. "Sorry," I said.

"Not at all," they said, almost in unison. "We like cats." I invited them to take off their coats and sit. I offered coffee to warm them and stumbled all over my words, remembering that they probably wouldn't drink caffeine. "Oh, that's alright," said Elder Sauers. I thought they both looked like they'd enjoy a beer and maybe Friday night on the boulevard in a muscle car after the football game.

Elder Gifford asked me in a soft, halting voice what I knew about the Mormon Church. The way his head tipped forward on his neck, his hookish narrow nose, and the thickness of his brow reminded me vaguely of a vulture. What did I know about the Mormon Church? I thought of the time when I was a kid in Sunday School and the pastor gave us a talk about Mormons and Jehovah's Witnesses. Pastor said that the Mormons claimed that the entire Book of Mormon was written on gold tablets, and if that were true, the tablets would have been very large and heavy; impossible for a prophet to carry for hundreds of miles on his back. I did not point out to Pastor that if Moses could part the Red Sea, a prophet could probably carry a few tablets. Then I thought about a friend in college who coined the word "mormonating" for fornicating. I kept these things to myself. It was true; I knew next to nothing about Mormonism and I didn't know any Mormons. What I did know I had learned recently from reading Terry Tempest Williams' book Refuge for a class, and I was curious to learn more.

"How are women treated by the Mormon Church?" I thought I'd get right to the point.

"Oh, women are equals and highly respected," said Elder Sauers. What a serious young man, in his neat, dark suit and gray tie.

"If that's true," I asked him, "Why aren't women allowed to perform blessings or healings?"

Jessica, the decrepit cat, had finished hairing up with Elder Sauers' pant leg, and was circling in my lap, her claws snagging in my thermal underwear. She paused her furry gray tail a question mark between my eyes. We both looked at Elder Sauers. Elder Gifford looked at Elder Sauers.

Elder Sauers cleared his throat.

He explained that women have more "natural" power than

men, that God gave women the most important power of all: the ability to give birth. Men can't give birth, we all know that. Therefore, in seeing the need to create a balance of power, God gave men the ability to bless and heal. In this way, men and women have equal powers, but different roles. God provides for and protects his children, and since God created man in His image, it is the man's role, his responsibility, to provide for and protect his family. It's the woman's role, naturally, to give birth and raise the children.

"Yes," peeped Elder Gifford when Sauers was finished: "I don't want my wife to have to work; I want to make things as easy for her as possible."

I had a few thoughts: 1) I thought of myself lying in a vast feather bed, six months pregnant; handsome Elder Sauers blessing me and feeding me grape—we were married, but I still called him Elder Sauers. 2) I thought of myself living in a tower with hand-maidens, as Elder Gifford, looking more vulture-like as we grew older, toiled in the lower chambers as a blacksmith. 3) I thought of myself driving away from my ex-boyfriend's town in a borrowed car five months before, on borrowed money—so far from home, so far from who I used to be.

I picked Jessica's claws out of my pants, folded her tail down, and laid her on my lap. "I have a problem with what you just said, Elder Sauers—you said that God created men in His image, and that men's fatherly lives on earth are modeled after God's. Where is the Mother? Who models the motherly role?"

"There is a Heavenly Mother," said Elder Sauers. "She stands at the shoulder of God. She's God's counterpart, equal with God; God couldn't have created anything without her. Just like in marriage between a man and a woman, God and the Heavenly Mother have roles, they work in a partnership."

"See," Elder Gifford brought in, "In most partnerships, whether it's business or whatever, you have a diversity of roles."
"What is her name?" I asked, looking at Sauers.

"She has no name," said Elder Sauers.

He explained that she is so sacred, that God wants so much to protect her, that he never utters her name. Everyone takes God's name in vain, kicks God's name around. God won't allow that to happen to the Heavenly Mother.

"We never get questions like this on our first visit," Elder Gifford said with a cackle.

"Don't you want a man who cherishes you and protects you?" said Elder Sauers. He was smiling a very white smile, maybe even a flirting smile. Uncanny, this change of tack. He probably assumed I'd lived there alone for years with two cats, no man, and broken

appliances I didn't know what to do with. He had no idea about my ex-boyfriend and all our talk about cherishing and protecting and partnership. It had sounded good in the beginning, but the exboyfriend had expectations about what my role in the partnership would be. He wanted to erase my life, my business, my friends. And, for what I thought was love, I let him. What I had when we parted ways was an empty bank account, no job, no home, and a wound-up biological clock.

"Come on, Elder Sauers! We're talking about the Heavenly Mother. Really. Why would God wish the Heavenly Mother to be invisible? You have to see, that as a woman, I have a hard time accepting that."

"Yes, I see," he said. "Yes. I don't know why God would want her to be invisible. I've never actually thought about that. But I know that you could pray to God and He would provide you with an answer."

Jessica got down from my lap and stood over her empty food bowl. When anyone looked in her general direction, she began meowing methodically. Taz, the younger cat, left his spot by the heater vent to meow by his bowl, too, his long white fur sprung with static electricity all over his squat, chunky body. The irregular black mask across his face made him look a little angry.

"Don't you think it's weird, though? Doesn't it mean that women are supposed to be invisible in their marriages?"

"No! No! Not at all. Really, we could schedule a home visit with two of our women missionaries, and you could ask them anything at all. Anything at all."

"I'd like that," I said. I got up to feed the cats.

"Is there anything we can do to help?" asked Elder Gifford.

"You can clean out the litter box—Naw! Just kidding. I sat back down at the table. "May we return to the topic of your current beliefs about God?" Elder Sauers asked. "I'm really interested in what you meant by not believing in God in the Christian sense."

I told him that when I was a kid, I was sure God existed. By the time I got through with college, I was sure God didn't exist. Now, I'm not sure what to think.

I could see the Elders stiffening, but I continued with my working definition: God was more of a feeling, a concept, like intelligence, love—not a being, especially not a man or a woman. Then I told them something I once heard Huston Smith, a philosopher and theologian, say in an interview with Bill Moyers—he said that trying to understand the nature of God with the human mind is like a pack of dogs getting together and trying to understand the nature of mathematics by giving it the sniff test.

When I finished speaking, we sat there a moment, contemplating the slightly obscene sound of the cats chewing and gulping their moist food. Elder Sauers took a tiny notebook out of his suit pocket and wrote down "Huston Smith."

"At least I'm not an atheist," I said.

"We're thankful for that," said Elder Gifford.

"God is love. God is intelligence," said Elder Sauers. "What I love about God is that He gave us freedom and He gave us intelligence. He put us on earth to learn and choose and decide things for ourselves. God won't force us to do anything—He knows we will love him better if we choose to." This sounded good to me.

I had something else I wanted to ask. They had to know I would ask eventually: "What's all that business about polygamy?" Elder Sauers smiled heartily and shifted in his seat. Elder Gifford took the reins. He explained that when the Mormons were moving west, trying to find a place to settle, they were the victims of a couple of massacres. They lost seventy-five percent of their men. (Did I know that until about 10 years ago, it was still legal in Illinois to shoot a Mormon on sight?) Hundreds of women were left without husbands to provide and care for them and their children. The remaining men took these women into their families as additional wives.

I was eager to interrupt. "I thought you said you could only be sealed to one person in heavenly marriage."

"That's right, the women who lost their husbands were still sealed to them in heavenly marriage. The second marriage was an earthly marriage."

"But why did they marry them—couldn't the women be cared for by the men, or by the community, without getting remarried?" "Marriage is a holy sacrament that all should partake in," said Elder Gifford, softly, with a slight shrug of his shoulders.

"But these women were already married, right? They were technically sealed in marriage to other men. Forever, right?" We were all quiet for a moment.

"Well, frankly, Dawn, that's got me stumped, too." Elder Sauers said.

"It was commanded by God," said Elder Gifford to Elder Sauers. "It was an emergency situation."

"Forgive me," I said, "but to be quite honest, that sounds a little suspicious."

"I admit, it does," said Elder Sauers. "It's not one of those things that the church is proud of. I can tell you that I definitely want to be sealed to one woman and one woman only." That's reas-

suring, I thought.

Jessica and Taz had finished their food and were looking for something to do. Taz decided to try Elder Gifford's shin as a scratching post.

"KNOCK IT OFF!" I shouted, and stamped my foot. Both cats

vacated the room.

"So," I asked Elder Sauers, "there are things about your religion that stump you, too? Little questions that niggle away at you?"

"Oh, the polygamy thing's nothing," said Elder Sauers. "I've got another question I'm working on." He looked a little sorry about saying that.

"Tell me!" I said. "I wish you'd tell me."

"I don't know," he said. "I'd rather not."

"Well, I have another question, then. The temple—is it true that I wouldn't be allowed to enter it?"

Elder Sauers explained that I would be able to enter after I had taken certain oaths. He said he couldn't tell me the words of those oaths, because they are never spoken outside of the temple.

"Why?" I wondered.

"Because Satan is everywhere, and some things must be kept sacred. Sacred words are uttered only within the temple." Elder Sauers was very serious about this. He glanced around the room a bit when he said it.

All these rules, these rigid roles, these invisible things. It was all too serious. It made me want to start taking off my clothes or some such ridiculous thing, to stir things up a little. Satan is everywhere.

I didn't want to hear any more about the church. "Tell me about yourselves. Where are you from and where are you going in life?"

Both of the Elders were from Salt Lake City, it turns out. Both had fiancées and jobs waiting at home. Both had spent their own savings to go on their missions. I envied them, their sense of purpose, their certain futures. Beautiful it would be, I thought, to know your way in life and to feel a sense of entitlement to eternal heaven; for me, my way becomes more obscure as I grow older, and heaven comes in moments, unexpected and probably wholly undeserved.

I did not expect to find that Elder Sauers had an older brother and a younger sister who were in trouble and addicted to drugs. I did not expect to find that both Elder Sauers and Elder Gifford had gotten in trouble as young teenagers and put their parents through hell. I had expected that they had come from shiny happy families and had always known happiness and certainty.

"I am impressed," I told them. "What turned you around? What brought you back to the church?"

"I was given a prophesy by a prophet of the church," said Elder Sauers, "about what I could expect to receive in my life if I returned to God and the path of the Latter Day Saints. What he told me was really really good. It was exactly what I wanted. I've already seen some of it come true." Elder Gifford nodded as if to say his experience had been similar.

What I wouldn't have given for a prophet that day to tell me that indeed winter would turn to spring, that my suitcase odyssey would end, that I would soon be feeling like myself again.

"What's bothering you then, Elder Sauers? What's the question you're grappling with? I can't help but want to know."

"Okay," he said. "This is the thing that really bothers me," he said. "If God created everything, created everything in the beginning, then what created God? What was before God?" He looked at me as though he were the first person who ever thought of this.

I suddenly felt like he had told me too much. He had made himself more vulnerable than he wanted to be. "You are struggling with the concept of infinity," I said. I couldn't help thinking that if this question was his greatest torment, he was in pretty good shape. We sat, silent, looked at each other a long moment. For the first time since my suitcase odyssey began, I felt the heavy loneliness drop away.

"Would you mind if we said a prayer together?" he asked.
"I'd be honored," I said. The Elders rose and stood side by side

"I'd be honored," I said. The Elders rose and stood side by side with their feet spread wide, their shoulders squared, and their arms folded in front of them. I followed suit. "Our Heavenly Father, our All-Knowing Father, thank you for bringing us together with this bright young woman today. We pray that you show her your love, and bring her to your side and bless her, O Lord. We pray that her questions may be answered, and her heart find peace."

"Amen," said I. I thought a fairer prayer, besides addressing the Heavenly Mother, would have requested that Elder Sauers' questions also be answered.

As they picked up their coats and moved toward the door, Elder Gifford asked if there was anything I needed help with around the house or yard, and when they next might visit.

"I would very much like to continue our conversation—as friends. You've given me a lot to think about. But I have to be honest with you—I am not going to join your church."

"Understood. There's no pressure. It's been quite an interesting afternoon for us, as well," said Elder Sauers. I expected him to

extend his hand and say something like, "I'm Tom, by the way." But there was nothing like that.

They gave me The Book of Mormon, I gave them a well-wish, and they walked out into the cold, cold evening, their dark suits fleeced with cat fur.

# Implicit Personality Structure Test: Reliability and Validity of Response Latency Measurement

Alan S. Reiman, Tarik S. Bel-Bahar, Colin R. Harbke

### **Abstract**

The Implicit Personality Structure Test (IPST) is an easily administered computerized measure that assesses five personality factors using the Implicit Association Test procedure (IAT) (Greenwald, McGhee, & Schwartz, 1998). Response latencies to a trait categorization task observed the strength of implicit associations between self-relevant concepts (i.e., "me," "not-me") and particular trait descriptors (e.g., "kind," "bold"). During five testing iterations, 748 students from the University of Alaska Anchorage participated in IPST testing. Across the five factors measured, both the explicit and implicit components were internally consistent. There was high convergence between explicit and implicit components for the negative pole of extroversion, but lower convergence for the less socially desirable poles (e.g., neuroticism), suggesting the implicit measure bypasses impression management behaviors. With future refinement, the IPST may provide access to socially undesirable or hidden domains of personality.

### Alternative Measurement Approaches

Personality is a multifaceted domain that requires a diverse array of testing methodologies for comprehensive measurement. Ozer and Reise (1994) "broadly categorize

our data collection methods: self-reports, observer reports, life events, and outcomes and performance in standardized, situational tests" (p. 368). In particular, implicit social cognition research has shown that low correlations between expressed attitudes on selfreport inventories and observed behavior are often due to impression management and social desirability behaviors (e.g., Banaji & Hardin, 1996; Fazio, Jackson, Dunton, & Williams, 1995; Greenwald, McGhee & Shwartz, 1998). Greenwald and Banaji (1995) stated that direct measures are inadequate for the study of implicit cognition (e.g. attitudes, stereotypes, self-esteem) since "almost any group of research subjects reports favorable judgements when asked to provide self-evaluations" (p. 10).

Likewise, in the realm of personality assessment, self-report measures (e.g., MMPI) often do not correlate with implicit methods (e.g., Rorschach) or with the reports of significant others and clinicians (Meyer, 1997). He suggests that these different approaches access separate portions of the personality spectrum; just as astrophysicists are satisfied in receiving different information through optical and infrared telescopes, personality researchers should content themselves with incongruent results across testing methodologies since different constructs are being accessed. In addition, Westen (1998) states that

the overreliance on self-reports in personality, clinical, and attitude research can no longer be maintained in the face of mounting [empirical] evidence that much of what we do, feel, and think is inaccessible to consciousness (p. 361).

Attitude and personality assessment researchers have continued to use direct (conscious) forms of assessment, despite the contemporary acknowledgment of profound unconscious influences. This may be because direct measurement tests are generally easier to create, administer, score, and interpret. In addition, direct measures are often more reliable than indirect tests. In response to the paucity of indirect measures in the literature, Greenwald and Banaji ended their 1995 article with the comment: "perhaps the most significant remaining challenge is to adapt . . . methods for efficient assessment of individual differences in implicit social cognition" (p. 20). The focus of this study was twofold: first, to develop an easy to administer test, that can access implicit personality structures, and second, to determine the reliability of this testing methodology, and convergence with self-report scores.

Schemas, Self-Schemas, and Response Latency Measurement
Schemas are organizational patterns in human cognition thatoperate in a variety of domains by guiding the encoding, transmis-

sion, and interpretation of information about self, others, and the world (Rumelhart & McLelland, 1986). Schemas allow individuals to maintain personal integrity while responding quickly and efficiently to a changing environment. In particular, self-schemas are well organized and often accessed structures that process self-referential information, allowing one to make judgements with greater ease and automaticity (Markus, 1977, 1990; Smith & Khilstrom, 1987; Stinson & Palmer, 1991). Self-schemas can be conceptualized as implicit associative networks, consisting of highly integrated and condensed records of previous experience. Personality trait descriptors (e.g., 'bold' or 'caring') are often used to observe the network of trait associations that serve as the underlying structure of selfschemas (Fiske & Taylor, 1984; Rogers, 1981; Smith & Khilstrom, 1987). The enduring nature of highly activated self-schemas leads to stable patterns of responding to environmental and internal cues, resulting in the stable nature of many personality traits (Cantanzaro, 1997), and the chronic accessibility and activation of self-schemas outside the working self-concept (Bylsma, Tomaka, Luhtanen, & Major, 1992).

A well-established line of research (Fekken & Holden, 1992, 1994; Holden & Fekken, 1993; Holden & Hibbs, 1995) has shown strong evidence for the validity of response latencies as schema indicators. Fekken & Holden (1994) proposed a trait-level operationalization of schema structure where "the latency of responding to a personality test item may reflect the presence of an integrated network of self-knowledge" (p. 105). In accordance with the implicit and automatic nature of schemas, a person who is extreme on a trait and the corresponding superordinate schema should be able to perform self-processing tasks with greater speed.

**Implicit Association Test Methodology** 

The Implicit Association Test (IAT), developed by Greenwald, McGhee, and Schwartz (1998), is a methodology that has been used extensively to measure implicit racial prejudice and self-esteem (see also IAT Website, <a href="http://depts.washington.edu/iat">http://depts.washington.edu/iat</a>). The IAT procedure presents two categories and measures how the concepts either facilitate or inhibit classification of stimuli. For example, in the first block, two concepts, "positive" and "white," are mapped onto the same button, while "negative" and "black" onto another button. The participant classifies a set of items into the categories by pushing the respective left and right buttons, thus learning the paired associations. In the second block, the conceptual pairings are reversed (e.g., "negative" and "white" on the same button). By analyzing participants' reaction times (RTs) for particular trials,

researchers can determine whether the first or second pairing is more compatible with the participants' schematic networks. Fast RTs indicate an implicit association between the two categories, while longer RTs may represent the cognitive intervention required to override incompatible or non-existent associations between the two concepts. Taking the difference of the two association strengths partials out the confounds of individual response speed and item length, eliminating the need for further standardization by item or participant. Greenwald et al. (1998) determined that the IAT methodology was twice as sensitive to implicit associations than other semantic priming tasks, finding significance to the level of p < 10-7 with 10-7 with 10-7 methodology, and consistent effect sizes up to 10-7 with 10-7 methodology.

The IPST attempted to measure explicit and implicit self-schemas along five factors labeled Extroversion (or Surgency), Agreeableness, Conscientiousness, Emotional Stability (or Neuroticism), and Openness to Experience (or Intelligence), (Digman, 1990; Goldberg, 1992).

### Method

### **Participants**

Two hundred and seventy-six students from the University of Alaska Anchorage participated in the fourth and fifth iterations of this study. An additional 472 students contributed to 3 pilot-testing iterations that will not be reported on further. Mean participant age was 24.8 (SD = 9.2); 188 (68.1%) participants were female, 71 (25.7%) were male, and 17 (16.2%) were undeclared. For participating in Iteration 4, students were entered in a \$50 lottery. The 79 students who came back for Iteration 5 were entered into a \$250 lottery. In addition, some students received extra credit in one of their classes. Apparatus/Materials

The experimental program ran on the Inquist software platform (Millisecond Software, 1998) on 36 desktop computers in a university computer lab. A modified version of Goldberg's (1992) Unipolar Markers was computerized and asked participants to rate how well a single word described them on a nine-point Likert scale ranging from "extremely accurate" to "extremely inaccurate." In a semantic priming task, Drane and Greenwald (1997) demonstrated that negations (e.g., "unhappy" or "not-bad") are more difficult to process than root words (e.g., "happy" or "bad"). In response to these findings, excessively complex words and negations from Goldberg's (1992) Unipolar Markers scale were replaced with other root words that were assumed to measure the same dimension, consisting of 42% of all the items.

The IAT component of the IPST consisted of 10 blocks of 20

practice trials, and 10 blocks of 40 testing trials (2 practice blocks and 2 testing blocks for each of 5 factors). For each trial, a participant's task was to classify a stimulus as coming from one of four lists. The list of "Me" and "Not-me" words were generated by the participants using a Microsoft Excel spreadsheet which asked for information participants associated with themselves ("me" list, e.g., name, birthdate, city of birth) and information that would typically not associate with themselves ("not-me" list, e.g., "Zimbabwe" or "Uruguay"). The remaining two lists were preset by the researchers using descriptive terms from a modified version of Goldberg's (1992) Unipolar Markers. On testing trials, participants classified the descriptive terms from the four following lists: (1) a list representing the positive pole of each factor (e.g., "extroversion"), (2) a list representing the negative pole of each factor (e.g., "introversion"), (3) the "me" list and, (4) the "not-me" list.

Although there were four lists for the participants to categorize a descriptive word, participants had to use two buttons in order to accomplish this task. For the first testing block, Button A represented the "me" and positive pole lists, and Button B represented the "not me" and negative pole list. For the second testing block the personality factor lists were reversed, such that Button A represented the "me" and negative pole list, and Button B represented the "not me" and positive pole list (see Figure 1 for a visual representation). Practice blocks of 20 trials occurred between testing blocks in order to familiarize the subject with new task demands.

Individual participants were escorted into a computer lab, given both verbal and on screen instructions, and completed the modified Goldberg's (1992) Unipolar Markers and the IPST. The

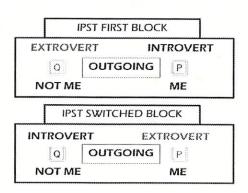


Figure 1. IAT button configuration for the first and second blocks.

average amount of time it took participants to complete these tests was 40 minutes. A maximum of 36 participants were tested simultaneously. Seventy-nine of the original participants (28.6%) returned one month later for the retest iteration of the IPST.

### Results

The data were reduced and standardized along the three following lines: self-rated scores, latencies to self-rated terms, and IAT effect to the same items (see Figure 2).

### **IAT Effect**

Inordinately long and short RTs were manipulated to reduce data skew. Excessively long RTs may contain a large conscious component or reflect temporary distractions, while shorter RTs may suggest random responding. Therefore, RTs under 300 msec or above 3000 msec were recoded as missing values for the analyses, consistent with Greenwald et al.'s (1998) data reduction practices. After the long and short latencies were truncated, the retained values (consisting of 93% of the original data) were log transformed to further reduce the excessive positive skew apparent in most response latency data sets.

The evaluation of each implicit factor consisted of mean RT differences between the first and second testing blocks (see Figures 1 and 2). Substantial pole presence was indicated by a large difference between the two testing blocks, with the fastest trials containing the most compatible associations. These measurements were made for both positive and negative poles of each factor. Thus, for each of the five factors there were two methods of implicit assessment (positive pole RT differences, and negative pole RT differences). To obtain a bipolar factor score, the negative pole score was subtracted from the positive pole score.

### Internal Consistency

The explicit factors were internally consistent, with alpha coefficients ranging from .75 (openness to experience factor) to .91 (extroversion factor), with a mean of .85 (see Table 1). Such alpha values were similar to the reliability estimates of Goldberg's 1992 study. The IAT factors were more heterogeneous; alpha coefficients ranged from .58 (emotional stability factor) to .78 (extroversion factor), with a mean of .67.

### Temporal Stability

Iterations 4 and 5 were run a month apart with the same 79 participants. Coefficients ranged from .81 (agreeableness factor) to .90 (extroversion factor), with a mean of .85, demonstrating the high temporal stability of the five explicit dimensions. The IAT scores had much lower correlations ranging from -.13 (openness to experi-

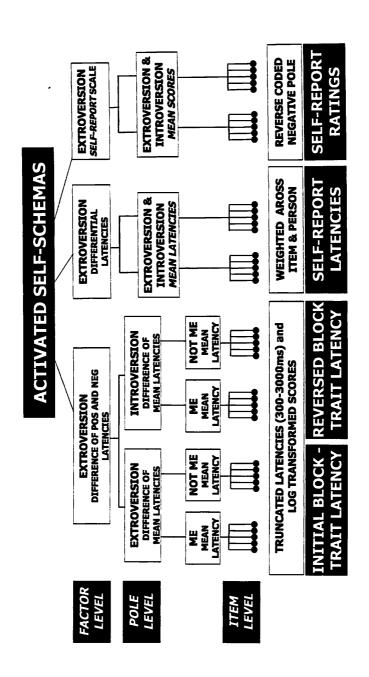


Figure 2. Structure of the IPST data reduction process.

ence factor) to .28 (agreeableness factor), with a mean of .12. It is questionable whether this instability resulted from state level measurement or from methodological deficiencies. The apparent instability relates back to Greenwald and Banaji's (1995) call for better methods for measuring individual differences in implicit cognition. Convergent and Discriminant Validity

The explicit (self-report) scores were compared with IAT measurements for the same 100 adjectives. Implicit and explicit measures of extroversion were more convergent than the other four dimensions (r = .46), potentially explained by the social acceptability and salience of the negative pole ("introversion"). As expected, less congruent results were found for the other four dimensions (see Table 1). The low social acceptability of the negative poles (e.g., "neuroticism") may have resulted in conscious impression management that the implicit measure bypassed.

### **Construct Validity**

IAT scores were normally distributed, consistent with theories that state personality characteristics are normally distributed in the Table 1.

### Reliability and validity of explicit and implicit measures

	Factor				
				Emotional	Open to
Measure	Extrover.	Agreeab.	Conscien.	Stability	Exper.
Internal Consistency (Coefficient Alpha)					
Explicit (Self-Disclosure)	.91***	.85***	.89***	.85***	.75***
Implicit (IAT)	.78***	.68***	.68***	.58***	.61***
Test-retest Correlations					
Explicit (Self-Disclosure)	.90***	.81***	.84***	.85***	.85***
Implicit (IAT)	.10	.38***	.27**	10	05
Convergent Validity (Expl. / Impl. Correlation)	.46***	.18**	.16**	.19**	.09

Note. \*p<.05. \*\*p<.01. \*\*\*p<.001.

population. Factor analysis was conducted for both explicit and implicit measures on two levels: first, when analyzing the ten poles (positive and negative for each of the five dimensions; e.g., extroversion and introversion), factor analysis with varimax rotation revealed an internally strong, well-differentiated five-factor structure for both the IAT effect and the self-rating of trait terms. Factor solutions accounted for a significant portion of the variance (explicit = 82% and implicit = 69%). Secondly, when the 100 trait terms for the IAT were reduced into factors, the resulting dimensions were more diffused and the loadings were weaker, accounting for 43% of the variance. These two findings indicate that the poles tend to align on a similar underlying axis, but that each individual latency

contains a fairly substantial amount of error, indicated by the more moderate item-level loadings.

Discussion

This study furnishes convincing evidence that response latencies can be used to measure personality dimensions. Response latency measurement offers a method for bypassing conscious defense mechanisms, and can be advantageous for assessing constructs that contain highly sensitive, socially unacceptable, or consciously inaccessible information. The IPST provides an easy to administer and score, as well as a cost effective measure that can be used to provide implicit assessments that would otherwise require trained clinicians to administer, score, and interpret (consider the TAT and Rorschach).

The IPST's explicit component is both internally consistent and stable over time, while the implicit component is less stable and consistent. Both implicit and explicit aspects of the test reduced into five relatively robust factor structures, and thus produced decent construct validity. These factors displayed reasonable convergence with anticipated constructs, while remaining divergent with other factors they were anticipated to not correlate with. Still, additional research and testing refinement is required before the IPST can be used as an independent measure of implicit personality.

The IPST's implicit component is able to discriminate in realms the explicit component cannot access. For example, as participants aged, they rated themselves as more conscientious, while they implicitly measured as less conscientious and open to experience. This is understandable when considering the negative poles of the two factors ("unconscientious," and "closed to experience") may influence socially desirable responding, and thus remain inaccessible to explicit methods.

### **Limitations**

Many of the trait items commonly used in five factor inventories were inordinately complex, or contained negation. Previous research found such descriptors more difficult to process on an implicit level, demanding the search for alternative traits that would be representative of the same underlying factor. The researchers replaced 42 of the 100 items with root words or more easily processed words. It is quite possible that many of these replacements were inadequate, such as in the "closed to experience" pole that contained 90% replacements due to the large number of negations in Goldberg's (1992) unipolar list of items. We assert that the lack of true exemplars (non-negations) of the negative pole of "open to experience" demands future attention to create an ade-

quate list of words that speak to the "closed to experience" construct.

### **Conclusion**

We may be embarking upon an era of empirical measurement of the subconscious mind, that was not possible before objective response latency measurement. In the future, other psychological tests, that are subject to impression management or that could not otherwise access implicit realms, may use these same methodologies. As with any new technology, response latency measurement should be viewed critically, and tested rigorously. If our efforts are successful, we may use these tools to explore the vast universe called the self.

### References

Banaji, M., & Hardin, C. (1996). Automatic stereotyping. <u>Psychological Science</u>, 7(3), 136-141.

Bylsma, W. H., Tomaka, J., Luhtanen, R., Crocker, J., & Major, B. (1992). Response latency as index of temporary self-evaluation. Personality and Social Psychology Bulletin, 18, 60-67.

Catanzaro, J. (1997). The effect of response latencies on the validity of personality scales. Unpublished doctoral dissertation, Fordham University.

Digman, J. (1990). Personality structure: Emergence of the five factor model. <u>Annual Review of Psychology</u>, 41, 417-440.

Draine, S. C., & Greenwald, A. G. (June, 1996). Unconscious processing of two-word negations: A 'Not Bad' experiment. Paper presented at meetings of the American Psychological Society, San Francisco.

Fazio, R., Jackson, J., Dunton, B., & Williams, C. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: A bona fide pipeline? <u>Journal of Personality and Social Psychology</u>, 69(6), 1013-1027.

Fekken G. C., & Holden, R. R. (1992). Response latency evidence for viewing personality traits as schema indicators. <u>Journal of Research in Personality</u>, 26, 103-121.

Fekken G. C., & Holden, R. R. (1994). The construct validity of differential response latencies in structured personality tests. Canadian Journal of Behavioral Sciences, 26(1), 104-120.

Fiske, S. T., & Taylor, S. E. (1984). <u>Social cognition</u>. Reading, MA: Addison-Wesley.

Goldberg, L. R. (1992). The development of markers for the big-five factor structure. <u>Psychological Assessment</u>, 4, 26-42.

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. <u>Psychological Review</u>, 102(1), 4-27.

Greenwald, A. G., & Banaji, M. R. (1998). Implicit Association Test. [On-line]. Available: http://depts.washington.edu/iat.

Greenwald, A. G., McGhee, D., & Schwartz, J. (1998). Measuring individual differences in implicit cognition: The implicit association test. <u>Journal of Personality and Social Psychology</u>, 74(6), 1464-1480.

Holden, R., & Fekken, C. (1993). Can personality test item response latencies have construct validity? Issues of reliability and convergent and discriminant validity. <u>Personality and Individual Differences</u>, 15(3), 243-248.

Markus, H. (1977). Self-schemata and processing of information about the self. <u>Journal of Personality and Social Psychology</u>, 35, 63-78.

Markus, H. (1990). Unresolved issues of self-representation. Cognitive Therapy and Research, 14, 241-253.

Meyer, G.J. (1997). On the integration of personality assessment methods: The Rorschach and MMPI-2. <u>Journal of Personality</u> Assessment, 68, 297-330.

Millisecond Software (1998). Inquisit by Millisecond Software [On-line]. Available: http://www.millisecond.com/

Ozer, D.J., & Reise, S.P. (1994). Personality assessment. <u>Annual Review of Psychology</u>, 45, 357-388.

Rogers, N. A. (1981). A model of the self as an aspect of the human information processing system. In N. Cantor & J. Kihlstrom (Eds.) <u>Personality, Cognition, and Social Interaction</u> (pp 165-198). Hillsadle, NJ: Erlbaum.

Rumelhart, D. E., & Mclelland, J. L. (Eds.) (1986). <u>Parallel distributed processing</u> (2 vols.). Cambridge, MA: MIT Press.

Smith S. S., & Kihlstrom, J. F. (1987). When is a schema not a schema? The big-five traits as cognitive structures. <u>Social Cognition</u>, 5(1), 26-57.

Stinson, G. H., & Palmer, S. E. (1991). Parallel distributed processing: Models of person schemas and psychopathologies. In M. J. Horowitz (Ed.) <u>Person Schemas and Maladaptive Patterns</u> (pp. 339-377). University of Chicago.

Westen, D. (1998). The scientific legacy of Sigmund Freud: Toward a psychodynamically informed psychological science. <u>Psychological Bulletin</u>, 124(3), 333-371.

### Authors' Note

We would like to extend our deep appreciation to our mentors, Dr. Robert Madigan and Dr. Greg Meyer, who acted as catalysts for on a flat surface and is enclosed within a frame. But cinematic mise en scene is also a fluid choreographing of visual elements that are constantly in flux" (42). The choreography of editing—deciding both which shot is chosen and how much time is allowed to view it—makes a difference. A good filmmaker knows that our eyes are never at rest and knows how best to use this in creating a film that will present his or her own interpretation of the material. These techniques, used skillfully, allow the viewer to experience the film on many levels.

The plot of "Like Water for Chocolate" is simple. The matriarch of a Mexican family, Dona Elena (Regina Torne), is a woman embittered by her loss of love. She is determined that her youngest daughter Tita (Lumi Cavazos) shall follow the family tradition of forsaking marriage so that she can devote her life to caring for her, Mama Elena. Thus, even from birth Tita is fated to be always at the beck and call of her tyrannical mother. Her only adult friend is the old cook Nacha (Ada Carrasco). But the entry of Pedro (Marco Leonardi) with his undying love for Tita presents some major complications for the mother's plan. Arau uses this simple plot as seeds which he nourishes into a sublime tableau.

The story is framed by the narration of a young woman (Arcelia Ramirez) who identifies Tita as her grandaunt. This grandniece addresses the viewer directly, almost intimately, as she looks into the camera. We are made aware from the outset of the film that the events she is referring to occurred some time ago, and Arau helps to further orient the viewer by inserting occasional dates or place names on the screen. Her sympathetic monologue, interspersed between some of the events of this story, enables the film to move forward in a combination of concrete visual elements, dialogue, and insightful commentary. This monologue also provides the viewer with information that is not readily apparent. The director can thus use selected film scenes to show the viewer movements in the narration, or can call upon the narrator's voice to explain further developments in the plot. Arau decides where film or the voiceover of the narrator is most appropriate, providing the viewer with a complete understanding of the movie's events.

Most of Arau's scenes have a soft and glowing quality to them, and this is especially apparent in the indoor shots. The overall impression of this film is that of restraint. The colors are earthtoned, muted; no characters wear brightly colored clothing, nor does the interior of the house contain flashy furnishings. Even the outdoor scenes reflect a subdued version of the sand and green

shades of a desert region. Lighting is generally soft, often showing evening scenes. This is not a film of glaring sunlight, but of gentle illumination. Indoors, the lighting is like that provided by candles or the natural light streaming through the windows. Because of this realist approach to lighting, the characters often have a warm golden appearance, making them look beautiful when even the most cruel acts are occurring. In fact, the low key lighting serves to intensify the level of passion in the film. For, from the very beginning, it is evident that this is to be no ordinary tale. Tita's abrupt arrival into the world, achieved as her mother lies upon a large kitchen table, is accompanied by a great flood of salty water which we are told leaves forty pounds of salt as it dries. The salt is then gathered to be used later for cooking. Tita's birth is followed by the sudden death of her father, apparently triggered by rumors that one of his three daughters is not actually his child at all. His death leaves little Tita completely controlled by her mother, though Nacha protects her as much as she can. Nacha teaches Tita all the skills of cooking while enclosed in the warm womb-like environment of the friendly kitchen.

Food is the most important motif in this film. The camera lingers over the loving preparation of food in the softly lit kitchen. The ability to prepare food, and the process of preparing and eating food, is featured throughout the narrative. Food has the ability to give life, or to take it away. Many of the scenes revolve around food, beginning with the opening scene in which Tita's grandniece is talking about the effects of onion on her grandaunt as she is chopping an onion in her modern kitchen. Numerous scenes show meals and banquets with both family and friends participating. Arau often uses close-up shots of the food to accent its importance. Tita's cooking is magical, for it echoes her joys and her sorrows. From the beginning, when the salt from her birth is used to season the family's food, to her tears in the wedding cake batter, and on to her tiny drops of passionate blood in the rose petal sauce, she exists both literally and figuratively in the food. Her tears cause everyone at her sister's wedding reception to experience the sadness of lost love, and her blood in the rose petal sauce awakens the passions of all at the table, even those who would prefer to feel no such emotion. Tita's cookbook is more than a book of recipes. She has recorded special moments in it, and as the narrator notes, the cookbook tells the story of her buried love.

Another motif that plays an important part in this film is Tita's knitting. Sometimes, "distorting the surface of the material world" will best convey "spiritual and psychological truths" (Giannetti 3).

After her wish to marry Pedro is denied by her inflexible mother, the camera shows Tita's fingers working furiously, as though along with the yarn she is knitting her sorrows into a great quilt. The narrator tells us that it will never be enough to keep her from the cold. She knits on the night of Pedro's marriage to her oldest sister, with close up shots of Tita's moving hands cutting between shots of the newlywed couple's awkward first night together. A year later, after she has experienced sensual passion through her preparation and consumption of the rose petal sauce, she steps out on to her balcony in the night air. At this point we see that her knitting has created a great quilt that drags along behind her.

Her knitting becomes part of a crucial scene that is pivotal to the movie. When Tita suffers a lapse into insanity, brought on by Mama Elena's continued forceful repression, the kind family doctor, John Brown (Mario Ivan Martinez), comes to take her away and try to help her. Tita is nearly catatonic as the camera shows her sitting mutely by the doctor in the wagon seat, and her loving servant Chencha (Pilar Arand) then gently covers Tita's shoulders with her knitted blanket. As the wagon moves right across the screen into the receding light of day, the camera follows the movement and then becomes stationery. Amazingly we see that her blanket seems to trail infinitely after them, length after length smoothly flowing behind the wagon as it moves further away. It is a striking scene, this combination of realistic and magical elements seamlessly united, and it provides a very strong visual example of Tita's life of patiently endured sorrows. The camera allows us to watch over the shoulder of faithful Chencha as Tita is taken away. Because the camera remains unmoving, the viewer, too, feels rooted to the spot, watching in a silent goodbye with a strong sense of loss. The wagon seems to be pulling upward to the top of the frame. An abrupt cut to an extremely long shot shows the wagon with its tiny figures far away along the red-skied horizon, still trailing the impossibly lengthy blanket. Later, the gentle doctor offers Tita yarn because he has noted that she likes to knit. But she will no longer need this outlet for her emotions, for she has been freed from her mother's control.

The film also equates fire with love and passion, especially the attraction between a man and a woman. During the scene following the sensual consumption of the quails with rose petal sauce, Tita's middle sister Gertrudis (Claudette Maille) runs to the bathhouse. Although she is already an independent-minded young woman, this food has awakened her deepest desires. The camera depicts her urgency in the rapid fire editing, showing close up shots of her

body, her face, her hands: even her skin seems to steam as she hurries to pour water down upon herself. Around the tub beneath her, flames are licking as though, witch-like, she is beginning to burn from her lustful desires. Soon the entire building is burning in a blaze of bright flames, and she runs feverishly to what she knows is her divine destiny.

Tita, through her extensive knowledge of cooking, also knows that contact with fire alters elements. Doctor Brown is attempting to inspire her to find the will to live again. He explains the story of how matches were invented, and says his grandmother has told him that inside each person is a box of matches which cannot be lit by themselves. These matches need the oxygen as from a lover's breath and a candle to ignite them, such as music or the touch of a hand. If they become damp, one will never be able to light any of them. Once lit, these flames of passion, love and inspiration feed the soul. But he cautions that one must not set off all of them at once. for then, the illumination will be so great that the soul will be able to see a tunnel showing us the path which we had forgotten at birth. This path leads us back to our divine origins, and we will want to return. It is obvious from his words that the doctor cares greatly for Tita, and we later will see that he loved her enough to allow her to be free. Just as his grandmother's tale sounds very much like a fairy tale in its simplistic form, so does this additional voicing of his love, and it is perfectly suited to the tangled web of this film.

The tale also serves as the explanation for the finale of the film. The year is identified as 1934 and it is evident that much has changed back at the ranch. Another feast is being held, this time in honor of the marriage of the doctor's son and Pedro's daughter. After the guests have left, Pedro and Tita are left alone. He has proposed that they get married, expressing the wish that they might still have a child together. The scene is to be a fulfillment of all that both have longed for over many years. Examining this scene closely shows us how the director constructs a narrative through his art. As the camera watches their approach through the darkness and into the light, so does the viewer. The only sound is that of crickets and their soft footsteps. The camera moves to keep them centered, and as Pedro carries her over the threshold, the theme music of the film begins softly. A shot from the interior shows the two of them as he brings her inside. The next shot shows the bed, symbolically isolated, which dominates the center of the frame, surrounded by hundreds of burning candles. This mise en scene is an excellent example of a closed form, which Giannetti has written will "tend to

imply destiny and the futility of the will" (86). The film cuts back to their glowing faces and back once more to the room. Nacha, though she has been dead for many years, is seen lighting a candle and she is looking directly into the camera. A cut to a close-up of Tita's smiling face shows her looking back. Nacha then turns away with a warm and loving look in her eyes. The camera now pulls back to show Tita and Pedro backlit in a glow, as Pedro lowers her feet to the floor and they begin to touch. The viewer believes that their destiny will finally be fulfilled; thus the events that follow next are even more visceral in their surprise.

The next shot shows the outside of the building as lightning flashes and thunder sounds, in a symbolic imitation of their desire. The camera cuts back to the lovers caressing, and then shows a close up of Tita's dress falling to her ankles. Once again the camera shows the building storm outside. The camera moves back to the semi-nude lovers as they caress. Again the film cuts to the building storm. Now a close up shows Tita loosening her hair, then cuts to a shot of Pedro's face and his body lying below us on the bed. Tita's hands caress his face and chest. The candles illuminate their bodies in a rich golden glow and it is as if all those years of waiting had evaporated, for their love is as strong as ever. The camera moves in close to show their rapt expressions as their fingers reach out freely to touch each other. A low camera angle shows Tita's face as though we are looking at her through Pedro's eyes. Another shot shows their fingers caressing each other. Again the outdoor storm is shown, but this time the director focuses on a shot of the house with one window illuminated. The next shot shows us a close-up of a long, slow kiss, and the first words are spoken between them. Pedro leans close to whisper to Tita, then at her urging repeats them in a shout. "I love you," he cries out and there is great passion glowing in their faces. Suddenly the camera shows us the bright light of the mythical tunnel, and a shot through the bars of the bed shows us his grimacing face. The next shot, from a higher angle, shows his body inert upon Tita and a shocked look on her face. The music has abruptly stopped.

Now we hear the quiet voice of the doctor, speaking in the same gentle tones that he first used to tell Tita the story of the matches. He is repeating the words of the tale as the once-bright room of candles darkens to imitate the bleakness of Tita. Cold bluish light is streaming through the windows from an unknown source. The camera, in a medium shot, pulls back to show Pedro's still body on the bed as Tita moves to a trunk at the bed's end, pulls out her knitted blanket, and as she kneels by the side of the bed,

covers Pedro and herself. The music has softly begun again to play and it grows stronger as the scene progresses. A close-up shot shows her shaking hands, holding something that we recognize as matches. Another close up reveals her crying face as she begins methodically to chew the matches. The director shows different profiles of her tragic face inter-cut with very brief shots of her memories with Pedro. Soon she has also fallen forward over Pedro's chest. and a mysterious fire begins to spark beside her. The camera cuts to a shot entirely of the sparks and then back to a medium shot of her crumpled over his figure in the foreground of the frame. A shot of two figures, male and female, coming together as they are outlined by brilliant light, is shown. Now fire is licking at the bed. A new shot shows the outside of the building as sparks and flames begin to fly. The director intensifies the feeling of fire by his rapid editing of different shots together, all showing the fire as it engulfs the lovers and the buildings of the ranch.

The narrator's voice tells us that the only thing which survived the fire is Tita's cookbook, as the camera slowly surveys the ashes that remain. The music, associated with the lovers, fades away and is quickly replaced with a different, less poignant melody. Another series of shots shows the cookbook beside the grandniece as she talks directly into the camera. The book appears unscathed. Behind her, as she speaks, is her mother and Tita, both smiling. She tells us that Tita will continue to live as long as someone cooks her recipes, and she proceeds with her careful chopping of the onions as the scene fades to black. Yet the viewer takes from this film the knowledge that the love that has been pledged for all eternity will continue. Much more than the cookbook has survived, and it is the audience who knows this. The story told to us through our eyes and ears impacts our emotions, and it is Arau's skill that allows us to experience the magic of his visual narrative so beautifully, a narrative that will survive now in our memory.

# Car Trouble

(車のトラブル)



Through the years I have heard people talk about car accidents they have had. Among these stories there are many who claim no fault. It had always been hard for me to believe these pleas of innocence . . . until I had a run of bad luck on my own.

About a month before I returned to America from my two-year stay in Japan, I started to have the worst luck with cars. I hadn't thought to record the events of that time period until my Japanese instructor at UAA, Hiroko Harada, gave an assignment to write an essay about an experience we had with cars.

This is the essay I wrote:

アメリカに帰って来る少し前に準備することがたくさんありました。忙しい中に起こる可能性のあった問題はみんな起こりました。例えば、車の面でもそうでした。仕事の帰りにいつも通っていた道を通っていたら、一時停止を無視して若い女性ドライバーが前にいきなりつったので来て、ぼくは急プレーキを踏んでも間に合わずにぶつかって、車がパーになりました。アメリカに帰るまで後一ヵ月余りの時でこまり

合わずにぶつかって、車がパーになりました。 アメリカに帰るまで後一ヵ月余りの時でこまり ましたが、うちに二台の車があったのでなんと か仕事に通えました。

その数日後、教会の夜の会議に参加している間、そのもう一台の車を近くの駐車場にとめていました。ぼくの車がじゃまで駐車場から出れなかったおじさんが、勝手にぼくの車に乗り込んで10メートルも後ろにバックしてしまい、そこに止めて会った車におもいきりぶつけてしまって、また一台パーになりました。そのおじさんが完全に悪かったので、かれのすばらしい、ワンダフルな車を台車として借りることが出来、ラッキーでした。

Let me briefly translate the content:

A short time before we came back to America there was a lot of preparation to be made. During that busy time anything that could go wrong did. Cars were no exception. One day I was driving home from work on the road I always took, when a young woman ignored a stop sign and drove out in front of me. I slammed on my breaks, but there was no time to stop. Our cars collided and my car was destroyed. There was only a little over a month left before we would return to America. It was an inconvenience, but since we had two cars, I was able to commute to work.

A few days later, I was at a late night meeting at church and had parked my car in a nearby parking lot. My car was in the way of another man's car, so he got in my car without permission and backed it up ten meters, smashing it into a car parked across the street. Again my car was destroyed. The man who used my car was completely at fault, so he lent me his great, beautiful, wonderful car as a replacement. It was luck.

BUT!

A few days later, I was at a nearby video store and a man slapped one of the employees. I intervened and the man got mad at me. He then kicked the car I was borrowing and created a big dent. That man was also completely at fault, so his father paid for repairs and prepared a replacement car for the replacement car in the meantime.

We had a car until we came back to America, but it was an event filled month.

After this experience in which I was driving a replacement car for a replacement car which was replacing my wife's car which was replacing my car, and none of it was my fault, I looked on car trouble in a different light. When someone says an accident wasn't their fault, I listen before I make any judgements.

I would like to take this opportunity to thank those who supported me through this showcase. Dr. Harada, thank you for your confidence and encouragement. I wouldn't have pursued this if it weren't for you. Yuko, thank you for your love and support.

# Dena'ina Orthodoxy: The Creation and Maintenance of a Syncretic Faith



#### **Abstract**

Russian Orthodoxy has been perceived as an inflexible institution which was imposed on the Cook Inlet Dena'ina in the nineteenth century; in fact Orthodoxy functioned as a syncretic religion and ultimately became a native institution similar to the one that emerged earlier on Kodiak. During a crucial thirty-year period which began in the 1880s, the Dena'ina were faced with economic disaster, epidemic disease and social break down; during this period, Orthodoxy served as an institution of transitional stability. The critical factors, which led to the adoption of Orthodoxy as a native institution, were the culture of ceremonialism in the Church, the minimal social control in "missionary Orthodoxy," the remote nature of Dena'ina villages, the use of lay readers, and the creation of Native Orthodox brotherhoods, which the Dena'ina may have seen as anomalous kin-groups.

# Acknowledgments

Although my name is the only one which appears on this paper, it is the product of a great many thoughtful and encouraging people. Thanks are due to my professor, Dr. William Workman, for whom I initially prepared this paper and who guided and encouraged me throughout my time in the Anthropology Department at UAA. Barbara

Sweetland Smith provided invaluable research materials and professional guidance. Dr. Steven Haycox kindly reviewed the semi-final draft and made extensive helpful comments. Last but certainly not least, my father tirelessly labored over numerous drafts and suffered through many practice presentations; he, my mother, and my good friend Christopher Thomas endured my stressed-out tirades and gave me priceless moral support. This paper could not have succeeded without them, and words cannot express my gratitude to them.

This paper is dedicated to my grandparents.

It has been argued that Dena'ina acceptance of Russian Orthodoxy in the nineteenth century was essentially a superficial process which outwardly exhibited Orthodox piety, while privately maintaining traditional Dena'ina beliefs (Boraas and Peter, 1996, 192-3). This argument implies that Russian Orthodoxy was and is a foreign European institution which was more or less imposed on the Dena'ina as a legacy of the Russian occupation. It does not account for the strong Dena'ina Orthodox piety today and the wholehearted, yet not wholesale adoption of Orthodoxy during a period which saw the deterioration and near collapse of traditional Dena'ina institutions. From the work of Townsend and Znamenski, one may conclude that Orthodoxy actually became a mechanism through which a great deal of Dena'ina culture was preserved in the face of stress and cultural collapse (Townsend, 1965, 1974; Znamenski, 1996 and unpublished). The Dena'ina reacted to Orthodoxy in a way which essentially melded Orthodox concepts with pre-existing Dena'ina social customs and institutions. The ceremonialism of the Russian Church, the minimal social control exerted by the Church and its representatives, the remote nature of Dena'ina villages in Cook Inlet, the use of lay readers, and the creation of Native Orthodox brotherhoods all combined in Cook Inlet to make conversion to Orthodoxy not only palatable to the Dena'ina, but desirable. The result was that the Russian Orthodox Church became a native Dena'ina institution in Cook Inlet, just as it had among the Koniag on Kodiak Island.

This paper will demonstrate the striking similarities between the Orthodox Church on Kodiak and that in Cook Inlet and show that the Dena'ina viewed the Orthodox Church not as an outside, European power, but essentially as a large and anomalous kin group. During a thirty-year period of instability, the Dena'ina came to view the Orthodox Church as a presence which could promise security in this world, not only in the next. Aspects of the Church and its brotherhoods made them appear similar to traditional Dena'ina kin-groups which were being undercut by the changing society, economy, and environment of Alaska at the end of the nineteenth and beginning of the twentieth century. In a world where kin was of paramount importance, Orthodoxy essentially served as a surrogate kin-group to which every member of a community could belong in birth, marriage, and finally, in death.

Kodiak is ideal for comparison with Cook Inlet because of the geographical proximity of the two and their lengthy history of interaction, both peaceful and violent. Kodiak was the site of the official establishment of the Russian Orthodox Church in America in 1794 (Rathburn, 1981, 13). Thereafter, Orthodox monks crusaded bravely against abuses of the Koniag by the Russian American Company, whose philosophy was best encapsulated in the quote, "God is high and the Tsar is far away—all is well as long as our boss is alive and well!" (Pierce (ed), 1989, 78).

Rathburn (1981) argued that the key factors in the conversion of the Koniag were the flexibility of the Church and the remoteness of the Alaskan frontier; furthermore, he suggested that Orthodoxy existed on Kodiak not merely as a foreign religion, but as a Native institution. He stated that several factors combined to create the Koniag version of the Orthodox Church: the remote nature of native villages; the use of Native languages in the church; the induction of Natives into the clergy; and the institution of "god-parenting" and "church kindred" (1981, 15).

Although Kodiak was the center of Russian activity in southcentral Alaska for many years, clergy were not present in every village in the Kodiak island group. Clerical responsibilities included travel to remote villages, but most communities saw priests very rarely, perhaps only once every year or two. In order to ensure that church services were carried on with regularity and that Orthodox doctrine was being properly administered, the Church made use of "lay" and "tonsured" readers (Rathburn, 1981, 15). Lay readers were representatives of the Orthodox Church who, with minimal education, could conduct church services and perform the sacrament of baptism (but not other sacraments) (15). Tonsured readers were lay readers who had a more public and long-lasting commitment to the Church, which was formalized by a bishop (15). Rathburn argued that the unsupervised readers served as primary agents of syncretism, integrating Orthodoxy with pre-existing Koniag beliefs (15). Orthodoxy opened up to Native and "Creole" priests early on to fill a significant lack of clergy members in Alaska (the first Creole was ordained in 1810); these priests would often

return to their homes and there serve to further integrate Orthodoxy with traditional Native beliefs (16).

Rathburn also argued that the Orthodox practice of offering its services in the language of its congregation served as an integrative device among the Koniag (16). Sermons, the Lord's Prayer, and other religious works were all translated into Koniag, which could be read aloud to the congregation with ease(16).

Rathburn saw the system of "god-parenting" and "church kindred" as a huge part of Koniag Orthodoxy (1981, 18). God-parenting in the Orthodox Church created social and kinship bonds, rather than economic ones; although the Church preferred that god-parents were not blood relatives, it only prohibited members of the nuclear family from acting as godparents; aunts and uncles were often godparents on Kodiak (18). Rathburn argued that this institution of "church kindred" expanded pre-existing kinship networks, both within and without Koniag villages.

Rathburn argued that it is in the context of isolation that the unique characteristics of Koniag Orthodoxy flourished (1981, 18). The combination of few priests and a huge territory resulted in a "hands-off" development of Orthodoxy among the Koniag; consequently, Rathburn stated that "Whatever it may have been . . . the Church on Kodiak has now largely transformed itself into a native institution" and one which was difficult even for other Orthodox people to understand (15).

The first Russian mission on the Kenai Peninsula was established at Kenai in 1849 (Znamenski, 1996, 30). However, Orthodoxy did not really gain any kind of a foothold in Cook Inlet until the 1880s, which marked the beginning of a thirty-year period of social and cultural crisis and instability. These years were as crucial and formative for the development of Dena'ina Orthodoxy in Cook Inlet as they were tragic and traumatic for the traditional Dena'ina way of life. Orthodoxy created a "middle ground," a bridge between traditional Dena'ina beliefs and social structure, and the western way of life which now confronted them (Znamenski, 1996, 41 and unpublished).

A number of environmental, economic, and social factors governed the introduction and acceptance of Orthodoxy by the Dena'ina: the monopoly status of the Alaska Commercial Company in 1883, the collapse of the fur trade at the end of the nineteenth century, epidemic and endemic disease, and the destructive effects of these on Dena'ina settlement, economy, and social systems. These factors created a context for the growth of Orthodoxy among the Dena'ina and encouraged the gradual integration of Orthodoxy into Dena'ina society.

Following the 1867 Alaska Purchase, the Russian American Company disappeared and fierce competition sprang up again between fur companies throughout Alaska, including Cook Inlet. Competition between the Alaska Commercial company and its rival, the Western Fur and Trading Company, artificially inflated the prices these companies paid Natives for furs. Furthermore, the Dena'ina of Cook Inlet were granted huge credit by these companies, temporarily increasing their wealth, but really miring them ever-deeper in debt. In a society where wealth was already of paramount importance, this influx of wealth destabilized not only the Dena'ina economy, but also the social constructs employed by the Dena'ina to deal with wealth. The status of the village qeshqa (a hunter and war-leader, traditionally of great wealth and importance) was dramatically increased, and indeed, the entire Dena'ina class system probably became far more complex in order to deal with increased wealth (Znamenski, 1996, 28; Townsend, 1965, 250; 1974, 5). The Dena'ina, who were essentially a semi-sedentary people prior to the Russian period, shifted into a semi-nomadic existence to accommodate the demands of the fur trade (Znamenski, 1996, 28). But in 1883, when the Alaska Commercial Co. overpowered its competitors and became a monopoly in Cook Inlet, the entire economic system changed. The artificially inflated price of furs dropped dramatically, and the Dena'ina economy suffered a serious blow. Additionally, in the absence of legitimate law enforcement, the employees of the Alaska Commercial Co. enjoyed free rein in Dena'ina villages, which resulted in abuses rivaling even those of the Russians. In many cases, Russian Orthodox priests and monks were the only intercessors on the behalf of the Dena'ina people.

The worst was yet to come. By the end of the nineteenth century, both the demand for and the supply of furs fell significantly, leaving the Dena'ina without their main source of income (Znamenski, 1996, 29). In an attempt to cut their losses, the Alaska Commercial Co. began to collect on the debts of the Dena'ina, which jeopardized the whole social structure built on borrowed wealth (Znamenski, 1996, 29; Townsend, 1974, 5). In 1901, the Alaska Commercial Co. left Cook Inlet. Without the temporary, artificial support which had allowed it to flourish, the Dena'ina social system foundered (Znamenski, 1996, 29).

In addition, the period between 1880 and 1910 witnessed the swelling of two new major industries which threatened the traditional livelihood of the Dena'ina (although one could argue that this economy had already been profoundly changed by the fur indus-

try): canneries and the railroad. Canneries first began to open in Cook Inlet in the later 1880s, and employed mostly Chinese and Anglo-American workers, although Dena'ina people were sometimes hired for "odd jobs" (Townsend, 1965, 204). Townsend argued that rather than being an economic boon to Dena'ina communities, the canneries instead advanced on traditional Dena'ina fishing grounds and significantly depleted fish stocks, in some cases eradicating fish runs altogether (as in Halibut Cove) (1965, 204). Additionally, by 1903, construction of the Alaska Central Railway had begun. Not only did the railway occupy territory that formerly had been Dena'ina hunting grounds, but it also lured many Dena'ina away from their villages as workers (Znamenski, 1996, 29-30).

Epidemic and endemic disease also played a major role in reshaping the Dena'ina world, both physically and ideologically. An influenza epidemic in 1884 was extremely severe, but it was not the first instance of epidemic disease in Cook Inlet. Townsend stated that between 1836 and 1840 a smallpox epidemic swept Alaska from Sitka to Norton Sound and, by one estimate, claimed the lives of 4,000 people (1965, 330). She listed deforming diseases as prevalent among the Dena'ina in the mid-nineteenth century (1965, 331). This is consistent with the later observations of Hieromonk Nikita, who stated in 1885 that, "in each village one may always see deformed, destitute people, blind, lame, cripples, walking and creeping on the ground" (Townsend, 1974, 14). In part, endemic tuberculosis was probably partially responsible for the deteriorated condition in which Nikita found the Dena'ina; Townsend stated that tuberculosis was among the major causes of death in this area from 1851 to 1909 (1965, 332). Also, scurvy, catarrh, typhoid fever, and eye diseases all afflicted Dena'ina throughout the nineteenth and into the twentieth centuries (Townsend, 1965, 332).

But by far the most devastating epidemic disease appears to have been the influenza epidemic of 1884. Nikita stated that this scourge claimed the lives of almost all the children under the age of two from Kenai, Ninilchik, Seldovia, and Alexandrovsky (Nanwalek) (Townsend, 1974, 13). One can assume that the epidemic reached far beyond the boundaries of these towns.

Disease had the effect of almost entirely eradicating two whole sections of the population: the very young and the very old. In a culture where traditions were handed down by word of mouth, it was likely devastating to the collective knowledge base of the Dena'ina to lose many elders so quickly, with so little warning. This, coupled with the emotional devastation of widespread deaths, par-

ticularly of young children, likely dealt a powerful blow to all sections of Dena'ina society. Veniaminov's account of the 1836 epidemic in Sitka notes that he was not unaware of the inroads into Native culture that disease might make for Orthodoxy; he stated:

(The disease) mainly killed the old people who would not give up their ignorance, superstitions and hatred of the Russians and all innovations. These people had a strong hold over the thoughts of most of the others. . . . The disease completely changed their opinion of the Russians; it also shattered their faith in the shamans who . . . died together with those who sought their help. (Nichols & Croskey, 1972, 47)

All of these environmental and economic factors played significant roles in determining Dena'ina receptiveness to Orthodoxy. The main impact was the generation of instability; instability of the economy, changing patterns of the semi-nomadic way of life, and the uncertainty of life itself. During this period of change and upheaval, the Orthodox Church appeared bearing a message of stability and of certainty, in this life and in the next. The Church provided a bridge between the old Dena'ina beliefs and the new European world, which Znamenski referred to as a "cultural middle ground" (Znamenski, unpublished). In this sense, the Orthodox Church functioned as an institution of transitional stability, one which supported and nurtured native beliefs and culture so long as they did not directly conflict with Orthodox doctrine.

Boraas and Peter argued that Dena'ina acceptance of Orthodoxy took place on two levels, the "public" and the "private" (1996, 193). They suggested that on the "public" level, the Dena'ina openly professed their piety, but in private, they retained their traditional culture and quietly integrated it with Orthodoxy (Boraas and Peter, 1996, 193). Orthodoxy was viewed as a separate entity, and not as an indigenous institution from this viewpoint. The problem with this perspective was that it fails to take into account the innate flexibility of Orthodoxy, and of Christianity in general.

The Orthodox Church grafted itself onto the Dena'ina consciousness, culture, and society by acting like a Dena'ina institution. A number of factors contributed to the image of Orthodoxy as a Dena'ina institution, and to its subsequent wholesale acceptance by the Dena'ina: the remote and dispersed nature of Dena'ina villages, the minimal social control implicit in "missionary Orthodoxy," the culture of ceremonialism practiced by the Church, the use of lay readers, and the creation of Native Orthodox brotherhoods. Together, these factors combined with the pre-existing Dena'ina

social structure to form a unique and enduring native institution very similar to that on Kodiak.

The most popular complaint in the journals of Orthodox clerics was that it was too difficult to reach their flocks. Clerics in Cook Inlet faced the same problem as did those on Kodiak and elsewhere in Alaska; there were always too few clerics and too many congregations to serve. Apart from instituting lay and tonsured readers and Native brotherhoods, there was really no way to remedy this problem. Father Bortnovsky seemed to have given into despair in one of his journals when he wrote, "From where could they (the Dena'ina) learn about Orthodoxy when they see a priest once a year for two-three days or even more seldom? What could one do in three days for the enlightenment of an entire village?" (Townsend, 1974, 23). The long periods between the priests' visits were probably highly conducive to the development of syncretic Orthodoxy, particularly when combined with the system of Native lay readers.

Although Russian Orthodoxy was Orthodox in name, it was not necessarily orthodox in practice. Orthodoxy in its "missionized" form was not a rigid or an inflexible institution. It seemed that the transmission of the Orthodox word was left very much up to the individual missionary and his particular circumstances; the primary object was to baptize every soul in sight, and to leave instruction until a later date. Because priests only rarely managed to visit villages after initial conversions, much of the religious instruction of lay people was left up to the readers, who themselves had received only minimal Orthodox education. The result was a brand of Orthodoxy which was widely recognized by the missionaries as being somewhat less than "pure," but which was certainly pious and definitely Christian.

Orthodox churches were filled with color, perfumed with incense, and resound with choral voices and bells. Services were highly ritualized and ornate. This would have appealed to the highly wealth-conscious Dena'ina (Znamenski, 1996 and unpublished). Osgood stated that wealth was a huge part of Dena'ina society, and determined not only social class but also village leadership (1966, 131-5). He stated that "the accumulation of wealth was the life interest of the qeshqa class [the nobility]" and that the potlatch redistributed wealth, increased social status, and functioned as an economic stabilizer (1966, 135). It seemed very probable, then, that a society which was experiencing extreme economic decline might find stability and comfort in Orthodox ceremonialism.

Lay readers among the Cook Inlet Dena'ina performed the same functions as they did on Kodiak Island, which was to hold

regular church services and to baptize children. This system of lay readers certainly lent itself to the integration of Church doctrine and traditional Native beliefs. One of the best examples is the "Kustatan Bear Story" retold by Peter Kalifornsky, in which a rampaging bear was finally killed by a bullet which had been "baptized" with holy water (1991, 291-301). An extremely interesting element in the "Kustatan Bear Story" occurs at the end, where Kalifornsky said, "If it wasn't for her (the Kustatan shaman's) power and the cross and the Bible, that bear might have destroyed both of the Kustatan villages" (1991, 301). According to Townsend, shamanism continued well into the twentieth century (1974, 26), and Hieromonk Nikita stated that a shaman might be Christian (1974, 12). Osgood defined the role of shaman as being "doctor, prophet and high priest. Moreover, he is a magician, a raconteur extraordinary and, very often, a person of great wealth, which is to say, a chief" (1966, 177).

Given that shamans occupied such a lofty place in Dena'ina society, it seemed likely that they would not be willing to relinquish this status. Townsend stated that the shamans did convert to Christianity and were sometimes "the best Christians" and acted as a "syncretistic force" in Dena'ina communities (1965, 294). It is possible that in some cases, former shamans or closet shamans may actually have become readers in the Orthodox Church and thus retained their positions in the community. They may even have gained prestige. This is a matter worth further investigation.

Both Znamenski (1996) and Townsend (1974) identified Orthodox native brotherhoods as major social institutions; Townsend stated that the brotherhoods may have fulfilled some of the "corporate responsibility which had been vested in the clan, and the responsibility for aid of the needy which was once held by the 'wealthy men' of the village" (1974, 17). Znamenski stated that the first brotherhood, St. Pokrov's Brotherhood, was created in 1893; in 1894-5, membership had already reached 132 people (1996, 31). The express goals of the brotherhoods (as outlined by Znamenski) were to unite village residents into a tight village circle, spread education, support the local Orthodox chapels and cemeteries, and help the poor (1996, 32-33). The brotherhoods, Znamenski stated, were highly respected and popular among the Dena'ina because they performed acts that helped whole communities, not just members of the brotherhood (1996, 33). Fr. Bortnovsky interacted frequently with brotherhoods on his progress through villages, and he noted that he advised the members of the brotherhood "to be brothers not only in name but in actions . . . " (Townsend, 1974, 22). Herein lies an important point: not only did the brotherhoods fulfill the social

obligations of wealthy men whose wealth had been severely undercut by economic disaster and disease, but they also may have served to expand kinship networks just as "church kindred" did on Kodiak (Rathburn, 1981, 18).

It may be that the Native brotherhoods, and indeed, the Orthodox Church were also perceived by the Dena'ina as a new kin-group. Is it not possible that the Dena'ina might have seen the Orthodox missionaries as representatives of new kin-groups which could easily be joined without renouncing any existing kinship ties? This might have been a tempting option for people suffering through a period of profound economic and social stress. In part, this explanation may also account for why the Dena'ina initially accepted Orthodoxy as an indigenous Native institution, as opposed to merely superimposing it onto their pre-existing beliefs. The Dena'ina saw Orthodoxy (and continue to see it) as the specific church of the Dena'ina people, or as Znamenski termed it, "Athapaskan Church, Russian Orthodox" (1996, 41).

Since the beginning of this century, the Dena'ina have continued to face difficulties posed by the massive influx of non-Natives. Part of this northward movement came in the form of Protestant missionaries, who were intent on converting Alaska Natives from Orthodoxy into the new faiths which they represented. This placed yet another tremendous strain on the Dena'ina who had, by the early twentieth century, adopted Orthodoxy as a native institution and considered themselves to be devoutly Orthodox. Consequently, there was considerable resistance to the Protestants, much more than there had ever been to Orthodoxy (Townsend, 1965, 297). Townsend stated that some families were split down the middle; the older, more conservative members would remain fiercely Orthodox, while the younger might convert to Protestantism (1965, 297). Conversions were rare; Townsend stated that converts were considered to be no longer members of the community (1965, 300).

The fact that the introduction of Protestant missionaries caused so much strife further illustrates several points about Orthodoxy among the Dena'ina. Among other things, the inflexible nature of the Protestant churches collided with the interests of the Orthodox Dena'ina. Attempts at conversion were met with resistance and with retribution, as converts were excluded from village functions, right up into the mid-twentieth century. Additionally, the austere nature of Protestant faiths did not agree with Dena'ina concepts of wealth and ceremonialism, whereas the Orthodox faith did. The problems with the American missionaries demonstrated better than anything the strong identification that the Dena'ina had with

Russian Orthodoxy; it had become an integral part of Dena'ina life, and one which bridged the gap between the twentieth century and the distant past; it had become Dena'ina tradition and an indigenous institution.

The combination of epidemic disease and economic collapse in the 1880s led to a weakening of traditional Dena'ina social relationships and the breaking down of kinship networks, simply because large portions of the kinship network were suddenly dying or moving away. The Orthodox Church, however, stepped into a rapidly growing vacuum and served as an institution of transitional stability during this crisis. It behaved not as an oppressive intruder but as an increasingly Dena'ina institution, upholding a culture of rich ceremonialism and wealth, allowing men of power to function as representatives of the Orthodox Church, and acting as a new kingroup. It served to expand kinship networks even as they were breaking down, by creating a new medium in which they continued to flourish. Russian Orthodoxy merged into the Dena'ina social and cultural system; there exist no "public" or "private" realms in the Dena'ina world, just one native religious institution.

#### References

Boraas, A., & Peter, D. (1996). A True Believer among the Kenai Peninsula Dena'ina. In N. Y. Davis & W. E. Davis (eds.), <u>Adventures through time: Readings in the anthropology of Cook Inlet, Alaska</u>, (pp. 181-195). Anchorage, Alaska: Cook Inlet Historical Society.

Kalifornsky, P. (1991). <u>A Dena'ina legacy: K'tl'egh'i Sukdu—the collected writings of Peter Kalifornsky.</u> Fairbanks, Alaska: Alaska Native Language Center, University of Alaska Fairbanks.

Mytum, H. C. (1992). <u>The Origins of Early Christian Ireland</u>. London.

Nichols, R. R., and Croskey, R (eds.) (1972). The condition of the Orthodox Church in Russian America: Innokentii Veniaminov's history of the Russian Church. <u>Alaska. Pacific Northwest</u> <u>Quarterly</u>(April), 41-54.

Oleksa, M. (1992). <u>Orthodox Alaska: A theology of mission Crestwood</u>, NY: St. Vladimir's Seminary Press.

Osgood, C. (1966). <u>The ethnography of the Tanaina</u> (2nd ed.). New Haven: Human Relations Area Files Press.

Pierce, R. A. (1978). An Orthodox religious mission in America, 1794-1837, with materials concerning the life and works of the monk German, and ethnographic notes by the Hieromonk Gedeon

(Colin Bearne, Trans.). Kingston, Ontario, Canada: The Limestone Press.

Pierce, R. A. (1989). <u>The around the world voyage of Hieromonk Gedeon, 1803-1809</u>. (Trans. L. T. Black). Kingston, Ontario, Canada: The Limestone Press

Rathburn, R. R. (1981). The Russian Orthodox Church as a Native institution among the Koniag Eskimo of Kodiak Island, Alaska. Arctic Anthropology, 18(1), 12-21.

Townsend, J. B. (1965). <u>Ethnohistory and culture change of the Iliamna Tanaina</u>. Ph.D., University of California, Los Angeles.

Townsend, J. B. (1974). Journals of 19th century Russian priests to the Tanaina: Cook Inlet, Alaska. <u>Arctic Anthropology</u>, 11(1), 1-30.

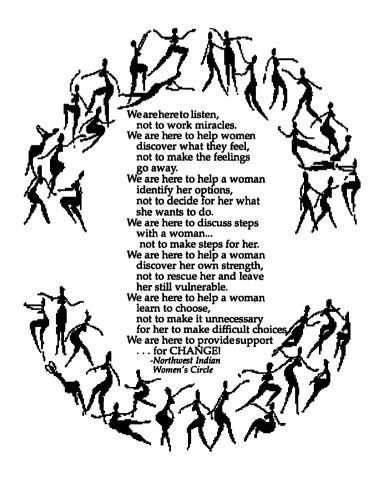
Znamenski, A. A. (1996). "Athapaskan Church, Russian Orthodox:" The Tanainas' encounter with Russian Orthodox missionaries, 1893-1917. Alaska History, 11(2) (Fall), 26-44.

Znamenski, A. A. (1998). <u>Native culture through Christian</u> glasses: Russian missionary <u>Ioann Bortnovsky on Dena'ina and Ahtna, 1895-1907</u>. Unpublished manuscript, Alabama State University, Montgomery.

# Eagles in Flight: The Women of the Alaska Women's Resource Center



Shannon Weimer Lìllian Baldwin Brenda Norton Rebecca Rhyneer



The Eagles in Flight project was developed as a partnership between the Alaska Women's Resource Center (AWRC) and senior nursing students at the University of Alaska Anchorage (UAA). The overall objective for this undertaking was to address the health care needs and concerns of the client population at AWRC in domestic violence and substance abuse recovery programs. The students' work was guided by the five principles of the nursing process: assessing, diagnosing, planning, implementing, and evaluating.

The AWRC is a non-profit organization founded in 1974 that is committed to improving the status of women. The mission is to aid women in exploring their potential, recognizing that healthy human relationships depend on the economic, emotional, physical, and spiritual well-being of women and men. Currently, AWRC operates two live-in shelters and offers programs for the clients dealing with such issues as parenting, domestic violence, and chemical dependence (AWRC, 1977).

#### Review of Literature

A review of current literature revealed numerous health-related issues relevant to the study group participants: substance abuse, domestic violence, fetal alcohol syndrome (FAS), parenting, and native women's traditions.

# Substance abuse/chemical dependency

According to a Robert Wood Johnson Foundation study, it was estimated that 15.1 million people abuse alcohol in the United States, including 4.6 million women (Smith, 1993). Women with alcohol or other drug dependencies are at an increased risk for HIV, AIDS, domestic violence and sexual abuse, depression, low self-esteem, lack of social support and lack of health education (especially in parenting), and mental health disorders (Jessup, 1997; Kearney, 1997). In Tiedje's study (1998), higher rates of recovery involved programs specifically designed for women, inter-weaving health, psychosocial, and legal systems to ensure that the best interest of the client and her children are pursued.

# **Domestic Violence**

In the United States an estimated two to four million women experience domestic violence each year (Barrier, 1998). Since 1986, domestic violence has been highlighted as a major public health problem (Johnson & Elliott, 1997). The American Medical Association (1992) recommended that female patients being treated in emergency, surgical, primary care, pediatric, prenatal, and mental health settings be screened for abuse as part of their medical history.

The underlying causes and concerns for safety resulting from family violence are frequently not addressed by health care providers. Moreover, abused women seeking help from nurses and physicians often felt that they were treated in an insensitive and judgmental manner and relied on health care providers only as a last resort (Sward, Carpio, Deviney, & Schreiber, 1998). Fetal Alcohol Syndrome

When a pregnant woman drinks alcohol, the alcohol passes freely through the placenta, creating a level in the fetus almost identical to that in the mother (Abel & Sokol, 1994). As a result, the infant is at an increased risk for being born with fetal alcohol syndrome (FAS). Characteristics of FAS are mental retardation, craniofacial abnormalities, hearing disorders, deformed limbs, growth retardation, hypotonia, and poor coordination. FAS is the leading known environmental cause of mental retardation in the western world, outranking Down syndrome and spina bifida (Wong, 1995). Recent studies suggest the incidence of FAS in United States is estimated to be 0.33 cases per 1,000 live births (Abel & Sokol,1994). The prevalence of FAS in Alaska was 0.8 per 1000 live births during 1977 through 1992. Among Alaska Natives, the prevalence of the condition ranged from a low of 1.4 per 1000 live births in 1977 to 1980, to a high of 4.1 per 1000 live births in 1985 to 1988 (Egeland, Perham-Hester, Gessner, Ingle, Berner, & Middaugh, 1998). **Parenting** 

Consciously or unconsciously, mothers and fathers select child-rearing strategies that help their children acquire competencies necessary to reach culturally defined and society-specific goals and expectations (Gross, 1996). Knowledge of such objectives and strategies are of paramount importance to any social or medical professional attempting to assist and advise groups of women on matters of parenting concepts and behaviors (Andrews & Boyle, 1995).

Another issue related to the study group was the growing social phenomenon of families headed by single adults. According to the Anchorage Women's Commission (1996), the fastest growing segment in the work force consists of almost 6 million divorced or separated women, most of whom have children (p. 6). In Anchorage, 23% of households headed by single mothers are estimated to fall below the Federal poverty line (Anchorage Womens Commission, 1996).

# Alaska Native Women and Native Culture

In spite of cultural and geographic diversities, native women are a unique group that share several common problems and chal-

lenges. Despite the fact that western medicine has steadily been encroaching upon native life in general, many Eskimo tribes still favor and utilize shamans and other traditional healing modalities (Antonson & Hanable, 1998). When collaborating with native populations, it is therefore of critical importance that one recognizes the client's culturally defined expectations about health care. Health care outcomes can be improved by considering and incorporating client's cultural beliefs about health and illness (Scott, 1997).

#### Theoretical Framework

To facilitate the development and implementation of the Eagles in Flight project, the collaborative practice model defined by Stanhope and Lancaster (cited in Bechtel, Garrett, & Grover, 1995) was utilized. The students facilitated ongoing communications between AWRC and other community agencies. Student activities included taking part in AWRC events, conducting one-on-one interviews, administering questionnaires, and facilitating focus groups with the study group. Mutual trust was developed due to the help of the key informants, the staff of AWRC. The empowerment of the study group participants was enhanced through their ownership of the evolving partnership project. The strategy to work in partnership with the study group participants within their own environment was crucial to the success of this venture. The participants were involved at each stage of this relationship. They asked questions, participated in conversations, and generously shared even private and intimate life experiences and feelings.

# Aggregate Assessment

The study group participants addressed through the Eagles in Flight project were defined as all clients currently enrolled in the domestic violence and/or substance abuse recovery programs at the AWRC. The process of information gathering was the initial step in developing goals and interventions. Windshield surveys and a facility walk-through were performed to gather input on AWRC's internal and external physical environment.

Quantitative and qualitative information-gathering modalities were utilized. The students developed a questionnaire that consisted of 30 fill-in and multiple choice questions. It was administered to all the participants in the study.

The study group participants also took part in focus groups, a qualitative assessment strategy. Tape recordings of the focus groups were transcribed before coding and analyzing the content. Three themes that emerged were (1) cultural alienation, (2) a sense of powerlessness, and (3) perceived limited access to health care providers. These were used to form the students' nursing diagnoses.

## Demographic Profile

The study group's population consisted of women ages 31 to 40. Of the 21 respondents, 18 identified themselves as Alaska Natives, 3 African Americans, and 1 Caucasian. At least 15 of the 21 group participants had children.

Yearly income for four of the participants was less than \$8,000. Thirteen of the participants made less than \$25,000 and one of the participants had an annual income of more than \$40,000. One individual had a college degree, 6 had "some college," 12 had high school diplomas, and 2 did not respond.

At the time of the survey, the mean period for the study group participants' current sobriety was 212 days. Eighteen of the 21 participants returning the survey listed histories of physical abuse. Eight of the study participants were single, four were separated, seven were divorced, one was married, and one was widowed. Health Interests

The main interests regarding health were determined as: general health/wellness information; CPR classes; on-site health care services; self-defense demonstrations; cultural activities; native healing modalities; self-esteem enhancement/empowerment; nutritional information; mental health, suicide prevention, and stress reduction; and issues related to domestic violence, FAS, and substance abuse.

Community Nursing Diagnosis, Goals, Intervention, and Evaluations

The assessment data and literature review was utilized to formulate two nursing diagnoses that addressed the majority of identified health concerns of the study group. Goals with specific objectives were then developed to provide evaluation criteria.

Nursing Diagnosis # 1

"Perceived powerlessness" related to emotional and physical traumas secondary to domestic violence and substance abuse, as manifested by verbalized feelings of decreased self-esteem, increased stress, spiritual distress, cultural alienation, and lack of knowledge of proper avenues to express or influence legislative and governing powers.

Goal. Study group participants will demonstrate increased cultural awareness and self -empowerment as evidenced by:

- 1. Increased insight into the ability to heal through self-expression as demonstrated by development of a book of personal recovery by the participants.
- 2. Increased awareness of a means of self protection as evidenced by active involvement of the study group participants in a self-defense class on October 24. 1998.

- 3. Increased knowledge and appreciation regarding native healing modalities as demonstrated by the study group participants commenting on a video of Alaskan native healer Della Keats on October 24, 1998.
- 4. Increased awareness and appreciation for native culture as demonstrated by attendance of the study group participants at a performance of a native dance troupe during the health and wellness exposition on October 24, 1998.
- 5. Increased awareness of the importance of active participation in the electoral process as evidenced by study group participants' verbalization of their awareness of political issues and their intent to vote in the upcoming elections of 1998.

Interventions and Evaluations. Reminiscence therapy is the process of telling about past experiences. Writing has long been used as a therapeutic technique to find meaning and to learn more about a person's uniqueness (Hirst, 1997). Through introspection and life-analyses, human beings are able to not only learn about themselves, but also to discover increased feelings of belonging with their groups (Leetun, 1996). The compilation of the collective experiences into a book format is a non-threatening way of sharing with one's community. This gives validity and value to the various contributors experiences in a concrete and realistic way (Napoleon, 1996).

Reminiscence therapy was used to address the expressed feelings of perceived powerlessness. Interventions were planned around the concepts of increased self-awareness and enhanced cultural appreciation. With the use of tape recorders and one-on-one interviews, the women in the recovery programs shared their thoughts, feelings, and memories. These were then translated into a book with 19 personal recovery stories, poems, and artwork. Many of the study group participants spoke of renewed sense of self-worth upon completion of this task. Throughout this intervention, confidentiality was carefully observed. No photos of the study group participants were taken and all tape recordings were destroyed or returned to the participants according to their wishes.

A videotape of Della Keats, a renowned Alaska native healer, was given to the study group participants as a strategy to increase their knowledge of traditional healing. The Tlinget and Haida Dancers, a group of well known Alaska native dancers, were asked to perform at the health and wellness exposition on October 24, 1998 as a way of addressing the study group's perceived need for cultural appreciation and pride. The study group participants were encouraged to dance with the dancers during the performance. Self-

esteem and self-confidence were further enhanced through a self-defense class presented by a local School of Karate during the health and wellness exposition.

Evaluation of the first nursing diagnosis indicated that all goals were met, an overwhelming majority of the study group participants present during the health and wellness exposition felt empowered and experienced enhanced feelings of cultural and personal enrichment, as evidenced by personal testimonies. Nursing Diagnosis # 2

"Increased risk" of impaired health among women in substance abuse and domestic violence programs at AWRC related to limited access to health care providers as demonstrated by verbalizations of requests for on-site health maintenance and education programs and stated perceptions of barriers to health resources due to lack of transportation, lack of child care, and time constraints.

Goal. The women at AWRC will decrease their risks of health impairments as demonstrated by:

- 1. Institution of ongoing on-site health screening programs by January 1, 1999.
- 2. Registration of at least 10 study group participants in a CPR certification class by November 30, 1998.
- 3. Institution of an annual ongoing on-site health fair.
- 4. Participation of at least five study group participants at eight health booths during the health and wellness exposition.

Interventions and Evaluations. The UAA community nursing students' main focus was to implement programs that would provide continuity of health care rather than episodic encounters. The students arranged a meeting between Ms. Kay Lahdenpera of the Municipality of Anchorage and Betsy Woodin of AWRC to establish an ongoing on-site health care program. It was determined that health screening and exams would be performed at AWRC by a nurse practitioner beginning December 9, 1998, and every six months thereafter. In addition, health education would be provided by a public health nurse beginning December 2, 1998, and every four months thereafter.

An annual on-site health fair was donated by Alaska Health Fair, Inc., the date to be determined later. A CPR course was donated by a local business for the month of November, 1998 and transportation to and from the course was also donated. Twelve study group participants attended. The study group participants also voiced concerns regarding child safety. To address child safety, the nursing students arranged for the donation of 30 child safety seats and instructions on their use from a local business.

During the health and wellness exposition at AWRC on October 24, 1998, issues concerning nutrition, chemical dependencies, stress reduction, political awareness, domestic violence, suicide prevention, and FAS were addressed through posters, displays, flyers, and one-on-one communication. Evaluation of the second diagnosis indicated that all nursing goals were met. Study group participants and staff verbalized their pleasure and excitement regarding the establishment of an on-going in-house health care program.

# Recommendations

- 1. Identify in-house responsibility for adjusting on-site health care activities in response to changes in the needs of the AWRC clients.
- 2. Include more community client-student interactions in the nursing curriculum.
- 3. Include grant-writing, fund-raising, and political action strategies in community nursing curriculum.
- 4. Require transcultural nursing as a requisite for graduation from the baccalaureate nursing program.
- 5. Emphasize the issues pertaining to domestic violence throughout the curriculum of every nursing school (Hoff & Ross, 1995).

#### Conclusion

The Eagles in Flight project for health enhancement that developed from the collaborative effort of UAA students, the AWRC, and other community agencies became a rewarding and positive experience in community health nursing. Through this partnership, health concerns of the AWRC population were addressed using a variety of interactive approaches. The support received from the staff and clients of the AWRC throughout the project will remain a highlight of the students' nursing school experience. The nursing students learned to apply the nursing process to the practice of community health nursing. They utilized concepts of transcultural nursing, health education, health promotion, dealing with aggregate populations, developing partnerships with local agencies. The nursing students also learned the value of group process and the importance of flexibility in interpersonal communications, within their own group, and with members of the community.

#### References

Able, E., & Sokol, R. (1994). [On line]. Available: http://well.com/user/woa/fsfas.htm.

Alaska Women's Resource Center (AWRC). (1997). Orientation packet. AK: AWRC.

American Medical Association. (1992). Diagnostic and treatment guide on domestic violence.

Anchorage Women's Commission. (1996). Assessment of needs and available resources for women in Anchorage. Anchorage, AK: Department of Health and Human Services.

Andrew, M. M., & Boyle, J. S. (1995). <u>Transcultural concepts in</u> nursing care.(2nd Ed.). Philadelphia: J. B. Lippincott Company.

Antonson, J., & Hanable, W. (1992). Alaska's Heritage.

Anchorage, AK: The Alaska Historical Commission.

Barrier, P. A. (1998). Domestic violence. <u>Mayo Clinic Proc.,73</u>, 271-274.

Bechtel, G., Garrett, C., & Grover, S. (1995). Developing a collaborative community partnership program in medical asepsis with tattoo studios. <u>Public Health Nursing</u>, 12(5), 348-352.

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# Mapping a Paleocene/Eocene Fossil Forest of the Chickaloon Formation in South Central Alaska



#### Abstract

The Chickaloon Formation is located in the Wishbone Hill region of south central Alaska. The Wishbone Hill district is a unique area not only for the multitude of plant fossils, but also for the exceptional 55 million-year-old fossil forest. This investigation describes 61 fossilized trees that were located, measured, and mapped in three abandoned strip mine highwalls of the Matanuska coal field in the Chickaloon Formation.

Two highwalls contain three different stratigraphic tree horizons and the third highwall contains four horizons. The documented mean tree measurements are 1.49 meters in length and .86 meters in width. The maximum tree length is 5.79 meters and the minimum tree length is .30 meters. The mean tree spacing distance is 9.49 meters. Fifty-seven percent of the fossilized trees lie in the East Pit. The West Center Pit contains 30% of the fossilized trees and the remaining 13% lie in the Deep Pit. Thirteen percent of the trees are preserved in a horizontal position and 7% are preserved tilted. Seventy-seven percent of the trees are preserved in a vertical growth position, indicating a high probability of in situ preservation. Until further research to locate the presence of attached preserved roots can be completed, the Chickaloon fossil forest should not be classified

as in situ. A system of low to high gradient meandering and braided streams during the late Paleocene and early Eocene time is the suggested depositional environment.

Fossil forests are unusual in the rock record; however, Paleocene data is extremely rare. Therefore, this paleoforest is one of the most extraordinary in the world. This fossil forest represents rejuvenated life after the major ecological extinction event of the Cretaceous/Tertiary boundary. The Chickaloon Formation is a spectacular area, and if left preserved, a remarkable location for studying an ancient riparian ecosystem.

#### Introduction

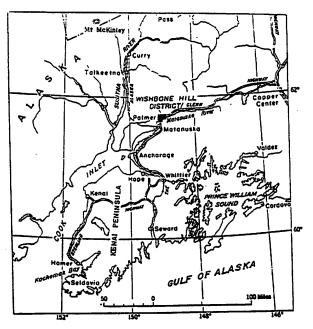
Professor Anne Pasch, from the University of Alaska Anchorage, was working on a project for the Alaska State Department of Natural Resources that the author found to be of great interest. She was looking for volunteers, and the author signed up to salvage plant fossils for the "Wishbone Hill Fossil Recovery Project" near Sutton, Alaska. Professor Pasch was systematically collecting plant fossils from exposures in abandoned strip mines before they were destroyed by reclamation activities. The cliff exposures were a hazard to the public because of steep slopes and frequent rock falls. Reclamation, known as the North Jones project, encompassed tearing down a highwall, filling in a deep pit, regrading it to a gentler slope and seeding it. During the summer of 1997, the author spent four Saturdays collecting plant fossils. In the course of this project, several trees were seen preserved in a vertical growth position in the North Jones project area highwall. The largest tree was 8.6 meters long and 1.25 meters in length. During the reclamation project in 1997, these unusual fossilized trees were all destroyed or buried. Nevertheless, casual observation of strip mine pits to the east and west of the North Jones project showed that additional trees were exposed in growth position. Professor Pasch suggested that with rock climbing experience the author should attempt to survey the steep slopes to determine the extent of the fossilized trees. Fieldwork for this project was conducted during the summer of 1998.

# Purpose and Scope

The purpose of this study was to locate, measure, and map the fossilized trees exposed in three strip mine pits on Wishbone Hill near Sutton, Alaska. The survey was intended to determine the size and number of fossilized trees in situ, their stratigraphic positions, and if they occurred in one or more horizons.

## Regional Geology

The Wishbone Hill district lies in the Matanuska River Valley northeast of Cook Inlet and contains the Matanuska coal field (Figure 1). To the north of the valley are the Castle Mountain Fault and the Talkeetna Mountains, which are made up of granite and gneissic rock. South of the valley lie the Chugach Mountains, which are made up of greenstone, diorite, and interbedded slate and graywacke.



<u>Figure 1</u>. Map of South Central Alaska, showing the Wishbone Hill district. Modified from Barnes and Payne, 1956.

The major units exposed in the Wishbone Hill district are the Wishbone and Chickaloon Formations. The Chickaloon Formation is of economic importance because of its coal bearing members. From 1915 to 1967, the Wishbone, Chickaloon, and Anthracite Ridge coal districts together produced as much as 6,130,000 metric tons of coal from this field (Flores & Stricker, 1993). The apparent rank of the coal ranges from subbituminous to anthracite, but is dominantly high-volatile B bituminous in the Chickaloon Formation. Surface and underground coal mines were localized in the Wishbone Hill district (Barnes & Payne, 1956). Surface mining in the Evan Jones Coal Mine, between Moose Creek to the west and Eska Creek to the

north of the Wishbone Hill syncline, created the strip-mine high-walls studied in this project.

The Chickaloon Formation is approximately 1,500 meters thick and consists primarily of interbedded sandstone, conglomeratic sandstone, siltstone, mudstone, carbonaceous shale, and coal (Flores & Stricker, 1993). It sits unconformably on the Cretaceous Matanuska Formation and is conformably overlain by the Wishbone Formation. The Wishbone Formation is approximately 900 meters thick and is made primarily of conglomerate, sandstone, and a small amount of siltstone and mudstone (Flores & Stricker, 1993). This formation shows local unconformable basal contacts where the conglomerate and sandstone cut into the underlying Chickaloon Formation.

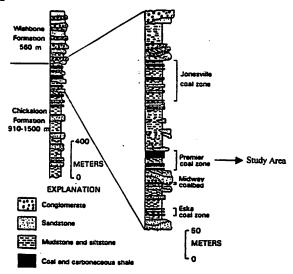
Ames, Riegel and Wolfe (1962) performed palynology and megafloras studies and found the Chickaloon Formation to be completely Paleocene in age. Triplehorn (1984) did radiometric age dating of the Chickaloon Formation and found it to be Paleocene and Eocene in age. Wolfe (1966) reported the overlying Wishbone Formation to be of Paleocene and Eocene age. According to Wolfe (1966), the plants of these formations accumulated in a subtropical, warm-temperate climate, which contrasts sharply to the extant boreal forest.

The most outstanding structural feature of the Wishbone Hill area is the canoe-shaped syncline, with an axis striking south 55-80 degrees west and plunging to the southwest (Barnes & Payne, 1956). Northeast left-lateral, oblique-slip faults have cut across this syncline. Flores and Stricker (1993) suggest these faults were active from the early stages of the deformation of the Castle Mountain Fault, during Mesozoic through Tertiary time, when the Chickaloon Formation was deposited.

The economic coal beds in the Chickaloon Formation are located in the upper 425 meters. There are a few thin coal beds in the lower section. Barnes and Payne (1956) subdivided the upper part of the Chickaloon Formation into four major coal-bearing zones. The four coal zones are Jonesville, Premier, Midway, and Eska. The coal zones contain coal beds interbedded with carbonaceous shale, bony coal, mudstone, tonstein beds, and ironstone concretions (Figure 2). The preserved forest of this study was found in the Premier coal zone of early Eocene age.

Flores and Stricker (1993) conducted a detailed sedimentological study of the Chickaloon Formation. They described the sedimentary, lateral and vertical facies, lithologies, sedimentary structures, associations, and suggested a depositional environment for

the Wishbone Hill district. They found that the mudstone and siltstone sections contain root marks, plant stems, tree trunks, tree leaves, and animal burrows. The coal and carbonaceous shale sections also contain ironstone concretions, which embody abundant plant fragments and tree trunks.



<u>Figure 2.</u> Composite stratigraphic section showing study interval in the Chickaloon Formation. Modified from Flores and Stricker, 1993.

The sediments of the Chickaloon Formation were deposited by west-southwest-flowing meandering to anastomosed streams. Flores and Stricker (1993) studied in detail the Eska-Midway-Premier facies sequence and deduced that the sandstones with crude point bars reflect fluvial deposits of high-sinuosity meandering streams. They suggested that the dominance of sand bedload, trough crossbeds, and lack of channel bars indicates deposition in bedload streams affected by seasonal discharge. The meandering and anastomosed streams possibly were a segment of a fluvial system that drained the Matanuska basin. These streams may have started under alternating base level conditions shaped by basin subsidence, shifting due to sediment compaction and growth faulting. Plant debris accumulated in mires and eventually formed the coal deposits. Flores and Stricker (1993) proposed that the left-lateral, oblique-slip faults controlled the position of fluvial channels and mires. Fluvial channels occupied the downthrown areas, while mire development was prolonged on upthrown areas. They indicated that the flood-plain sediments caused by crevasse splays during flood discharges from meandering streams initiated anastomosis.

Progradation of crevasse splays into the flood plain allowed bifurcation and integrating of crevasse channels. This procedure, affected by a high rate of subsidence, enlarged areas of anastomosis and flood-basin lake development. Flores and Stricker (1993) indicated that while the anastomosis developed, a crevasse channel was altered into a major conduit. Through time, this conduit transformed from a low to a high-sinuosity stream, to the onset of a meandering stream, and to the repetition of the fluvial cycle.

# Other Fossil Forests

Fossil forests are extremely rare. Therefore, in order to understand the Wishbone Hill forest, the author studied and compared descriptions of two well-know fossil forests, and a recently discovered fossil forest in Alaska, to the forest in the Wishbone Hill district.

#### Yellowstone Fossil Forest

The fossil forest in Yellowstone is located in the northeast section of the national park in a jagged mountainous region located between 6,000 and 11,000 feet above sea level. The climate in this region is now characterized as cool-temperate to subarctic, with a forest made up of conifers and hardwoods. When the trees flourished, in the Eocene epoch, 58 million to 37 million years ago, the area was noticeably different. The countryside was made up of many broad, flat river valleys divided by mild rolling hills. The mean elevation extended from 2,000 to 4,000 feet and the climate ranged from warm temperate in the hills to subtropical in the valleys. These trees were preserved by a remarkable series of events that turned the ancient forest into stone. Just how this occurred is a matter of hot debate. Dorf (1964) believed each of the 27 distinct layers of petrified trees were preserved in situ by layers of volcanic debris. Fritz (1980) reinterpreted the deposits of the forest as volcaniclastic sedimentary rocks that were deposited in a complex alluvial system. Fritz's findings indicated that mud flows originated high on the flanks of nearby volcanic vents. These flows uprooted trees near the rims of the volcanoes, and during transportation roots, branches, and bark were broken off. The subsequent mud flow deposits were reworked by braided streams. Braided streams also transported plant debris and oriented the horizontal logs. In 1984, Yuretich entered the debate. His findings indicated that most of the upright tree stumps were buried in place and were not moved long distances by mudflows or braided streams. He listed three possible mechanisms for the burial: (1) burial by mudflow, (2) destruction of trees by rising water from damned rivers, (3) burial by volcanic ash (Yuretich, 1984). Clearly, there is a debate as to

whether the preservation of the trees occurred in situ at Yellowstone National Park.

The fossil forest in the Chickaloon Formation is similar to the Yellowstone fossil forest because it is also unclear if the fossilized trees were preserved in situ. There is no substantial accumulation of volcanic debris found in the Chickaloon Formation to suggest burial of these trees by lahars or ash. Fritz (1980) interpreted mudflows and braided streams as the depositional mechanism for the Yellowstone fossil forest, whereas Flores and Stricker (1993) described meandering to anastomosed streams as the depositional environment of the Chickaloon Formation. Both the Yellowstone and the Chickaloon fossil forests were presumably preserved by a series of depositional events rather than a single flood, mud flow, or lahar.

#### Florissant Fossil Forest

Florissant Fossil Beds National Monument contains a buried forest from the Oligocene epoch, 37 to 24 million years ago. Huge sequoia trees are preserved in situ from successive volcanic eruptions of airfall tephra. One of the giant sequoia stumps preserved measures 74 feet in circumference and is the largest known specimen of its kind (Wallner, 1976). Cinnamon-barked trees, pines, hardwoods, cycads, ferns, rosebushes, butterflies, mosquitoes, and lice are a few elements of the Oligocene landscape that have been fossilized in Florissant Fossil Beds.

This fossil forest does not provide a good preservation model for the Chickaloon Formation because no significant amounts of ash have been found. The delicately preserved stumps of sequoia trees in the Florissant Fossil Beds National Monument were exploited by private owners who allowed visitors to dig and remove any fossils they found. The same scenario is occurring in the Wishbone Hill district today. Even though a mining company leases the land, no one is keeping out amateur fossil hunters and the preserved trees and fossils are rapidly disappearing.

### Lili Creek, AK

Decker, et al (1997), described another fossil forest on the North Slope of Alaska. An outcrop with six preserved trees is located near the headwaters of Lili Creek, a north flowing tributary of the Meade River in the western North Slope of Alaska. The trees are in growth position and range from 10 to 70 centimeters in diameter and are up to 4.5 meters tall. A horizontal log approximately 1.6 meters long is present. The trees are preserved in fluvial mid-Cretaceous sediments. No roots were located, but some trees appeared to be rooted in the upper part of the underlying coal seam

or transitional carbonaceous mudstone facies (Decker, 1997). To date, the taxonomic classification, process of preservation, and the preservation position of the trees is open for debate.

The sedimentary lithologies of the Lili Creek fossil forest are similar to the Chickaloon fossil forest because there are no apparent root systems exposed in either. Coal is an important marker bed in both fossil forests. The Chickaloon fossil forest is 55 million years old, whereas the Lili Creek fossil forest is 97 million years old. The Chickaloon fossil forest contains 61 preserved trees and the Lili Creek forest has only six. Fossilized flora elements have been found in the Chickaloon fossil forest but not in the Lili Creek fossil forest. Methodology

The study area is composed of three highwalls to the east and west of North Jones reclamation project. The East Pit is located to the east of the North Jones project area, and the West Center Pit and the Deep Pit are located to the west of the project. These pits were previously named during the North Jones Reclamation activities. All fieldwork was completed during the summer of 1998. The original plan was to rappel down the highwalls to map, measure, and sample the preserved trees. Upon the first attempts to rappel down, a debris avalanche was created from the tossing of the climbing rope. It was immediately clear that rappelling on these severely unstable cliffs was too dangerous. It became apparent that these trees would be studied from the ground.

Using a stadia rod, Garmin G.P.S. 38 Personal Navigator, 300foot measuring tape, and a camera, three pits containing the preserved trees were examined. The preserved trees were located by studying the exposures with binoculars and each section containing a fossilized tree was photographed. The distance between each tree was calculated using a 300-foot tape measure, and a G.P.S. reading was taken under the preserved trees. Samples were taken from trees that were accessible. Sketches of each tree with their stratigraphic sections and locations were made in the field. Final maps of the highwalls and preserved trees were drawn using the photographs and sketches. The scale was calculated from the field measurements and estimated from stadia rod increments seen in the photographs. Forty-nine percent of the tree sizes were estimated from the photos. If these sizes are not exact, then they are underestimated because of the oblique angle of the cliff. Fifty-one percent of the tree sizes were measured accurately with a measuring tape. Tables 1-3 list the measured sizes of the length and width of the fossilized trees. Width is an approximate measure of the diameter of the tree.

While it was not the main focus of this project, it was almost impossible not to find plant fossils in these pits. During the course of the investigation, a small plant fossil collection was made that indicates a subtropical to temperate forest.

#### Results

In three pits, a total of 61 fossilized trees were discovered. Seventy-seven percent of the trees are preserved in a vertical growth position and 7% are tilted. Thirteen percent are horizontal and 3% have an undetermined position. Fifty-seven percent of the trees are found in the East Pit. Of those in the East Pit. 74% are vertical, 14% are horizontal, 6% are tilted, and 6% have an undetermined position. The Deep Pit contains 13% of the trees and a 100% are vertically positioned. The West Center Pit contains 30% of the trees. Seventy-two percent of the West Center Pit trees are vertical, 17% are horizontal, and 11% are tilted. Tables 1-3 show the measurements of the fossilized trees and their positions, H for horizontal, V for vertical, and T for tilted. The largest tree is 5.79 meters in length and the smallest tree is 1.49 meters in length. Fossilized trees in the East Pit and Deep Pit lie in three different stratigraphic tree horizons. The West Center Pit contains four different stratigraphic tree horizons. Each tree horizon is divided into groups of sequentially spaced trees. Table 8 shows the mean spacing distance of the fossilized trees subdivided by groups. The overall mean spacing distance of the fossilized trees is 9.49 meters.

The question still remains as to whether the trees are preserved in situ. Because no attached root systems were located, the Chickaloon fossil forest should not conclusively be classified as an in situ fossil forest. It is highly unlikely that the large percent of vertical trees were transported and then flipped upright into their growth position; therefore, this fossil forest is most likely in situ. Until further research of the root system is completed, the question of in situ preservation will remain.

Table 9 lists the 22 fossils that were collected and identified. Fossils of oak, dawn redwood, poplar, walnut, hickory, horsetails, and ferns were found, which indicating that this fossil forest is made up of a mixed coniferous and deciduous subtropical to temperate forest.

Maps of the highwalls in each of the three pits are drawn to scale, showing the fossilized trees in stratigraphic position (Plates 1-3). The key to the stratigraphy is on the bottom of the map. If there is more than one symbol per stratigraphic layer, the beds were interbedded with the indicated lithologies.

#### Conclusion

The fossil forest of the Wishbone Hill district contains at least 61 fossilized trees, of which 77% are in vertical growth position. Presumably, there are more fossilized trees in the Wishbone Hill district to be discovered. Further research could determine if new trees have weathered out of the exposure and if roots are present. Fossil forests are extremely rare and numerous tree horizons are even more unusual. Two pits of the Wishbone Hill district contain three different stratigraphic tree horizons, and one pit contains four.

The Wishbone Hill district is a unique area not only for the abundant plant fossils, but also for the exquisitely preserved 55 million-year-old fossil forest. The Chickaloon fossil forest is also unique in that foliar elements are associated with petrified trees. These fossil trees contribute information about tree spacing, density, and other characteristics of fossil forests that are not ordinarily known. Interest has increased concerning the late Paleocene to early Eocene time period because of recent awareness of global warming at the end of the Paleocene. This fossil forest could help answer questions concerning these and other climatic issues. This fossil forest signifies rejuvenated life after a major ecological extinction event of the Cretaceous/Tertiary boundary and represents the beginning of the age of flowering plants. The Wishbone Hill district is a marvelous area, and if left preserved, a wonderful location to study ancient life.

Table 1.

<u>Measurements and Positions of Fossilized Trees in the West Center Pit.</u>

Tree	Tree	Length	Length	Width	Width	V, H,
Count	no.	(m.)	(ft.)	(m.)	(ft.)	or T
	<u></u>					
1	1	3.35	11	0.61	2	V
2	2a	3.66	12	1.22	4	V
3	2b	4.27	14	0.61	2	V
4	2c	4.57	15	2.44	8	V
5	2.1	0.61	2	0.61	2	V
6	3	5.79	19	0.46	1.5	T
7	3.1a	0.76	2.5	0.30	1	V
8	3.1b	1.28	4.2	0.23	0.75	Н
9	4	0.91	3	0.61	2	V
10	4.1	3.35	11	0.61	2	H
11	4.2	1.22	4	0.30	1	H
12	5a	0.91	3	0.46	1.5	V
13	5b	1.22	4	1.83	6	V
14	6	3.35	11	0.61	2	T
15	7	4.57	15	0.61	2	V
16	7.1	2.13	7	2.44	8	V
17	7.2	1.83	6	1.83	6	V
18	8	2.74	9	2.44	8	V

Table 2.

<u>Measurements and Positions of Fossilized Trees in the Deep Pit</u>

Tree Count	Tree No.	Length (m.)	Length (ft.)	Width (m.)	Width (ft.)	V, H, or T
1	1a	0.91	3	0.61	2	v
2	1b	0.61	2	0.61	2	v
3	1c	1.83	6	0.61	2	v
4	2	0.91	3	3.66	12	V
5	<b>3</b> .	1.83	6	1.22	4	V
6	4	0.61	2	0.61	2	V
7	5	0.30	1	0.61	2	V
8	6	1.22	4	0.61	2	V

Table 3.

Measurements and Positions of Fossilized Trees in the East Pit

<u>/16</u>	Measurements and Positions of Fossilized Trees in the East Pit						
-	Tree	Tree	Length	Length	Width	Width	V, H,
_	Count	no.	(m.)	(ft.)	(m.)	(ft.)	or T
	1	1a	0.91	3	1.52	5	V
	2	1b	1.34	4.4	0.79	2.6	V
	3	2a	0.76	2.5	1.22	4	V
	4	2b	0.61	2	1.19	3.9	V
	5	2c	1.37	4.5	0.61	2	T
	6	3a	0.61	2	0.30	1	?
	7	3b	1.22	4	0.61	2	Н
	8	3с	0.61	2	1.83	6	?
	9	4	0.61	2	1.83	6	V
	10	5	0.61	2	1.22	4	V
	11	5.1	0.61	2	1.22	4	V
	12	6	0.30	1	0.61	2	V
	13	7	1.22	4	0.61	2	V
	14	8	1.83	6	0.91	3	V
	15	9a	0.76	2.5	0.46	1.5	V
	16	9Ь	0.61	2	0.30	1	V
	17	9c	1.22	4	0.30	1	V
	18	10a	1.83	6	0.46	1.5	V
	19	10b	0.91	3	0.30	1	V
	20	11a	0.61	2	0.91	3	V
	21	11b	0.91	3	0.30	1	V
	22	12a	0.61	2	0.30	1	V
	23	12b	1.22	4	0.30	1	T
	24	13	3.96	13	0.61	2	Н
	25	13.1	0.30	1	0.61	2	V
	26	13.2	0.30	1	0.30	1	V
	27	14	2.44	8	0.30	1	Н
	28	14.1	0.30	1	0.30	1	V
	29	14.2	0.91	3	0.30	1	Н
	30	14.3	0.91	3	1.83	6	V
	31	15	0.61	2	0.30	1	V
	32	16	1.83	6	0.46	1.5	Н
	33	17	1.22	4	1.22	4	V
	34	18	1.52	5	0.30	1	V
	35	19	0.61	2	0.91	3	v

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Table 4. Statistical Summary of Tree Sizes

	Length	Length	Width	Width
	(m.)	(ft.)	(m.)	(ft.)
Mean	1.49	4.90	0.86	2.82
Max	5.79	19.00	3.66	12.00
Min	0.30	1.00	0.23	0.75
Range	5.49	18.00	3.43	11.25

Table 5.

<u>GPS Reading for Deep Pit</u>

Tree no.	Reading
	27.64 44 444
1a-c	N 61 44. 444'
	W 148 57. 759'
2 & 3	N 61 44. 464'
	W 148 57. 856'
4 & 5	N 61 44. 501'
	W 148 58. 036'
6	N 61 44. 325'

Table 6.

<u>GPS Readings for the West Center Pit</u>

Tree no.	Reading	Tree no.	Reading
1	N 61 44. 538′	4.1	no reading
	W 148 56. 647'	. 4.2	no reading
2a	N 61 44. 422'	5a & b	N 61 44. 460'
	W 148 56. 797'		W 148 57. 210'
2b	N 61 44. 402'	6	N 61 44. 469'
	W 148 56. 786'		W 148 57. 203'
2c	N 61 44. 542'	7	N 61 44. 511'
	W 148 56, 774'		W 148 57. 182'
2.1	no reading	7.1	N 61 44. 500'
3	N 61 44. 536'		W 148 57. 194'
	W 148 56, 833'	7.2	no reading
3.1a	no reading	8	N 61 44. 529'
3.1b	no reading	_	W 148 57, 467'
4	N 61 44, 252'		=== +: • =•
-	W 148 56. 980'		

Table 7.

<u>GPS Readings for East Pit</u>

Tree no.	Reading	Tree no.	Reading
1a	N 61 44. 565'	10a&b	N 61 44. 557'
	W 148 56. 136'		W 148 55. 987
1b	N 61 44. 563'	11a&b	N 61 44. 530'
	W 148 56. 158'		W 148 55. 982'
2a	N 61 44. 473'	12a&b	N 61 44. 530'
	W 148 56. 097'		W 148 55. 919'
2b	N 61 44. 533'	13 & 13.1	N 61 44. 527'
	W 148 56. 069'		W 148 55. 847'
2c	no reading	13.2	no reading
3a,b,& c	N 61 44. 406'	14	N 61 44. 598'
	W 148 56. 113'		W 148 55. 845'
4 & 5	N 61 44. 525'	14.1	no reading
	W 148 56. 143'	14.2	no reading
5.1	N 61 44. 523'	14.3	no reading
	W 148 56. 145'	15	N 61 44. 540'
6	N 61 44. 516'		W 148 55. 654'
	W 148 56. 120'	16	no reading
7	N 61 44. 588'	17	no reading
	W 148 56. 060'	18	no reading
8	N 61 44. 589'	19	no reading
	W 148 56. 021'		•
9a,b,& c	N 61 44. 535'		
	W 148 56. 007'		

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Table 8. Fossilized Tree Spacing Distance

Pit	Tree No.(s) in Groups	Mean Spacing	Mean Spacing
Name		(m.)	(ft.)
Door	1. 1b 1.	E 40	10.00
Deep	1a-1b-1c	5.49	18.00
Deep	2-3	6.10	20.00
West	1-4-5a	176.78	580.00
West	2a-2b-2c-2.1	52.32	171.66
West	3-3.1a	9.14	30.00
West	3.1b-4.1-4.2	28.65	94.00
West	7.1-7.2-8	103.94	341.00
East	1a-1b-2a-2b-4-5.1-6	11.84	38.83
East	7-8-10a-10b-11b-12a-12b	25.70	84.33
East	9a-9b-9c-11a-13-13.1-14-	30.48	100.00
	14.1-14.2-14.3		
East	15-16-17	11.73	38.50
East	18-19	3.05	10.00
	Total Mean Spacing	9.49	31.15

Table 9.
Listing of Plant Fossils

Plant:		Quantity:
<b>Equisetinae:</b>		
	Equisetum	1
Filicineae:		
	Matonia	1
Gymnospern	<u>ṇae:</u>	
	Metasequoia Cone	2
	Metasequoia	5
	Glyptostrobus	1
Angiosperm	( Monocotyledonae):	
	Flabellaria	1
Angiosperm	(Dicotyledonae):	
	Populus	3
	Cocculus	1
	Juglans	1
	Quercus	1
	Hydrangea	1
	Carya	2
	unidentified seed	1
	unidentified leaf	1

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#### Reference Cited

Barnes, F.F., & Payne, T.G. (1956). The Wishbone Hill district, Matanuska Coal Field, Alaska. <u>U.S. Geol. Survey Bull. 1016</u>, Wash. D.C., p. 88.

Decker, P.L., Wilson, G.C., Watts, A.B., & Work, D. (1998). Growth-position petrified—trees overlying thick nanushuk group coal, Lili Creek, Lookout Ridge Quadrangle, North Slope, Alaska. Short Notes on Alaska Geology, Professional Report 118, p. 63-70.

Dorf, E.(1964). The petrified forest of Yellowstone Park. Scientific American, 210, p. 106-114.

Flores, R.M., & Stricker, G.D.(1993). Early cenozoic depositional systems, Wishbone Hill District, Matanuska Coal Field, AK. Geological Studies in Alaska, U.S. Geological. Survey, 1992, <u>U.S. Geological Survey Bulletin 2068</u>, Wash. D.C., p. 101-116.

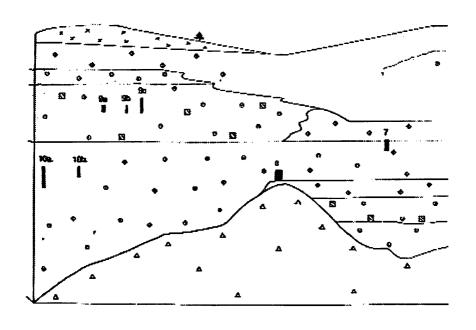
Fritz, W. J. (1980). Reinterpretation of the depositional environment of the Yellowstone "fossil forest." <u>Geology</u>, 8, p. 309-313.

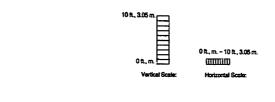
Triplehorn, D.M., Turner, D.L., & Naeser, C.W. (1984).
Radiometric age of the Chickaloon Formation of the south-central Alaska Location of the Paleocene—Eocene boundary. Geological Society of America Bulletin 95, p. 740-742.

Yuretich, R. F.(1984). Yellowstone fossil forest new evidence for burial in place. <u>Geology</u>, 12, p.159-162.

Wallner, J. S.(1976). Florissant's petrified landscape. <u>National Parks & Conservation Magazine</u>, 50(2), p. 4-7.

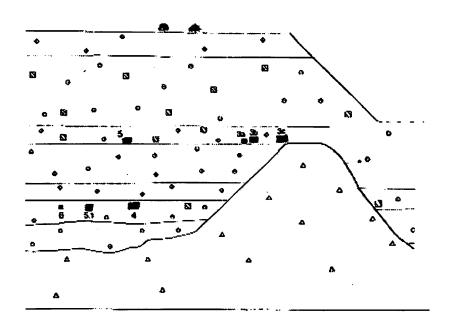
Wolfe, J. A., Hopkins, D.M., & Leopold, E.B (1966). Tertiary stratigraphy and paleobotany of the Cook Inlet Region, Alaska. <u>U.S. Geological Survey Professional Paper 398-A & B</u>, Wash. D.C., p. 1-171.



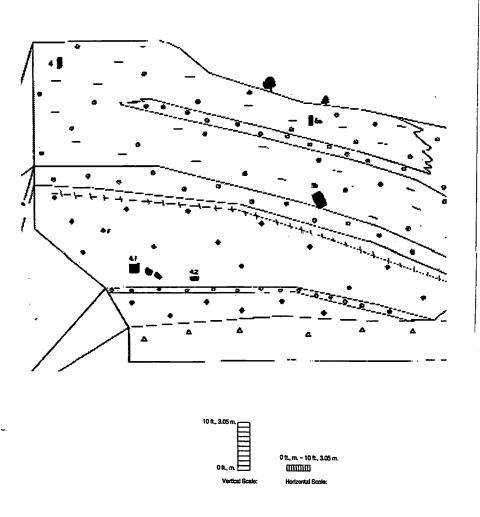




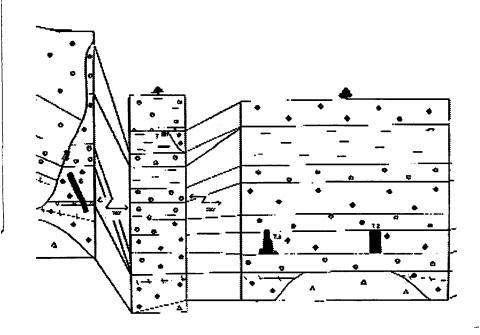
Portion of Plate 1. East Pit Map



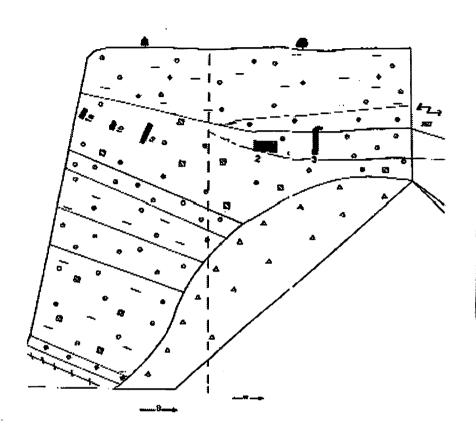


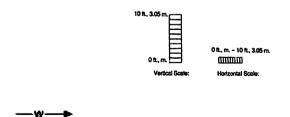


#### Portion of Plate 2. West Center Pit Map

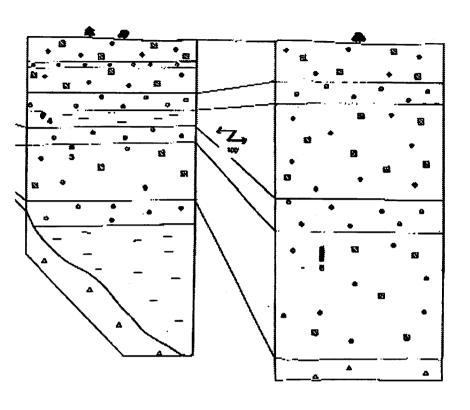


# Key: Ash: Soil: X Coal: Siltstone: S Sandstone: S Fossilized Trees: Mudstone and Shale: Carbonaceous Shale: S Itronstone Concretion: 8





Portion of Plate 3. Map of Deep Pit



Key:

Ash: Soil: X

Coal: Siitstone: Siitstone: Sandstone: S

Fossilized Trees: Mudstone and Shale: Carbonaceous Shale: Sironstone Concretion: S

### Eggs



My sister wants my eggs. Not the kind from the grocery store. Or if you're lucky enough, straight from the chickens, when they're still warm and you can all but feel life in your hands.

No, Barb says, she wants the ones inside me. My heart lifts when I hear her voice. She's actually called me. It's only been forever since we've talked. Snow covered the ground the last time, and now it is summer, blazing, humid, Chicago hot. The kind that melts crayons. On the phone, she hints around that there might be something in it for me. Namely, money. Mom straight out told me there would be some money in it for me. But Mom has her own agenda. Grandkids. One for each arm and two tagging behind. Mom and I have danced a bit about that one. But I've never considered myself the maternal type.

"Let me get this straight," I say carefully to Barb. Barb's a lawyer, so you've got to watch yourself. I learned that the hard way. "Your eggs are bad and you want my eggs."

Mom, once again in her starring role as confidant and traitor, has let me know about the babies who weren't being born in Barb's household. Barb, of course, in her role of perfection, would never admit to a thing like that. "My eggs

are good?" I ask. My eggs better than hers? Me, have something that Barb actually wants?

"I could practically guarantee that your eggs are good," Barb says slyly. I know by the way she says this that she knows. About my shock and tears. About being torn apart over it. About me leaving Mom's potential grandkid go for about four months and the doctor not wanting to do it. About Mom's commandments on the subject, confusing me. About the picket line. About my ex-boy-friend fleeing the scene in a very un-family values way. That was two years ago. It still seems like yesterday.

Barb gets around to inviting me to her new house in Glencoe, a rich suburb. It's not East Rogers Park. And it's not a baking hot third-floor walk-up. She and Lance have a pool, she tells me. I make an effort to act surprised, even though Mom has already told me all about it. Mom occasionally spills beans over my side of the fence, too.

I have to take the train, which wipes out my last bit of money. Payday a whole week away. I figure I might get dinner out of it. I bring my sketchbook, planning to draw people on the train. But a few stops later, I catch myself nervously picking off the price sticker on the front of the unopened notebook. I feel inside myself a brief hardening in my stomach. A hardening that could be lifted away by my visit to Barb or could just as easily turn to the familiar hot searing lead once again.

The last time I'd seen her, over Christmas, she and Mom, in concert, had told me how I was wasting my life. How I needed to get a real job, a real boyfriend. I am a good artist given half the chance. I comfort myself by paging through sketches I've made: a lonely big shaggy dog tied up in front of the 7-Eleven; a man in a black leather jacket, smoking a cigarette while looking down the tracks for the El; a girl with long straggly hair crouched in the corner of her bedroom biting her nails.

"Glencoe," the conductor announces. I get off the train uncertainly. Barb is there in her brown Saab and Ann Taylor sunglasses. She manages to give me a small hug, not exactly sisterly, but with some enthusiasm. We make small talk in the car. I figure she might be a little surprised by the appearance of my hair, short and streaked, black on brown, and the addition of a second nose ring: I guess Mom didn't lay that one on her. But Barb's got to realize even her going-nowhere sister has the ability to change in four months.

"They do this procedure now," Barb says in her lawyer's voice

"They do this procedure now," Barb says in her lawyer's voice when we've gotten the surfacey catch-up stuff out of the way. She has me sit in the family room while she goes to pour some iced tea in the kitchen. When she returns, she hands me a glass and sits down. "They take eggs out of a woman, fertilize them and transplant them into the recipient."

"You mean into you," I correct.

My sister brushes imaginary dust off the arm of her brand new southwestern-style sofa. Her house, what I have seen of it so far, is spic and span and smells like potpourri. The air conditioning is not doing its job. "Into whomever," Barb says. "Into whomever wants a baby." My iced tea glass sweats on the coffee table.

It's amazing to think about these little eggs inside me. I had felt my own ovulation again after I had once gone through with it. Felt this egg on my left side move from my ovary down the fallopian tube into my uterus. A little part of me wanting to hatch, determined to become part of the cruel world. I reach into my black bag.

"You can't smoke in—, "Barb starts. I pull out a calendar. The one her and Lance gave me for Christmas last year. Instead of the airbrush I really wanted. This is the type of calendar that helps you begin the new year, actually find a good job (not one in a stationery store), possibly even take a course (one at the real college, not art classes at the community college), schedule something. Like egg giving. I flip to next month and study the dates. "Do I give you an egg at a special time of the month?" I ask, "Or do they just reach in and grab one whenever?" This comes out snottier than I expect, as if I am eight years old again and Barb is twelve.

"Sherry, we could choose something else," she sighs. "Lance and I, we just wanted to keep it in the family, to know what we were getting."

I wait. She doesn't say anything about the money, or about how the egg will be treated. Nicely? Badly? Or that it's really me she wants a part of forever. Good quality family stock. Instead she says, "They take more than one egg. For more than one opportunity."

"And the fertilizing part?" I ask. The thought of Lance squitting at some porn magazine doing it then and there and later dumping it on my eggs makes me want to lose it. Lance, in my opinion, is bad enough dressed and mowing the lawn.

Barb gets up quickly. "You know, we don't have to talk about all this right now. I really want to show you the house." She is very obvious in trying to act nice to me. She gives me a tour, the kind where I am not allowed to bring my drink with me. I have to take my sandals off so I don't dirty the new beige wall-to-wall. The only thing I can think of to say every time she opens a door is wow or

cool. The place looks like a model home, everything picked up, furniture dusted, carpet vacuumed, all the woodwork shiny. The opposite of a studio apartment with peeling paint and stained ceilings, one with tubes of color, canvasses and still-life scenes set up all around. It is much too big of a house for just the two of them. I am not by myself in this thought. Mom has said this also.

I imagine the house with a child in it, the only thing missing

I imagine the house with a child in it, the only thing missing now. What are you going to do when there's a whole load of toys around, I think. When we get upstairs, Barb shows me the two square bedrooms. One has a twin bed in it. For a moment I think she is going to ask me to stay overnight, but instead she walks in the room and says, "This would be the baby's room; we'd get a crib and everything."

We stand there together looking at the nearly empty room. I feel something catch in my throat. I finally say, "What would you name it anyway?" Barb doesn't answer. When I almost give up completely, she says, "Chelsea if it's a girl. Sam if it's a boy." I don't say anything to that. What can a girl say to anyone after she's run through all the names herself?

We head downstairs and go out to the back patio. The pavement burns my bare feet. The inground pool shimmers. It is shallow on one end, twelve feet deep on the other. The blue water is pretty, chlorine clean so you can see the bottom. Lance is keeping it up. Or maybe they hire a kid to do it. I strip off my T-shirt and cut-offs: my faded red suit feels too small, the straps dig into my shoulders. I sit on the edge of the pool and dip my feet in. The water is cool against the heat.

"Do you want a Tums?" my sister asks. I turn and she is pulling a roll of them from her beachrobe pocket. For a moment I allow myself to luxuriate in the thought that Barb is actually caring for me, being generous. When Mom used to go out on dates, Barb had to watch me—only it didn't feel like watching—it was a conspiracy of fun on a Friday night: watching slasher movies, and making Jiffy Pop. We dared each other to dive under the curtain on the sliding glass door to look out into the night to see who or what was looking in from the other side of the glass. We would lie in bed together giggling, until Mom would get home. Mom would stick her head into the bedroom door and say, "What in the world are you two girls laughing at?" resentful of our secrets.

"No thanks," I say to Barb, who is holding the roll out to me. "My stomach isn't out of wack." Actually I was starving. I could have easily eaten a full course dinner.

Barb sighs, and unrolls one distractedly, "Calcium, Sherry. Do you want to be a crouched old lady?"

I hunch my shoulders and carve the air with crow's feet hands. "Hee, hee." Then like a bomb, I blast into the water, splashing it all over everywhere. I turn to laugh with Barb, but instead, I see her pick up a white towel and wipe off her feet. Like a dainty princess. She sighs again in the frustrated way I had to hear all while we were growing up.

In the water, I become ballsy. "Tell me something, " I say to her, paddling and spitting like a dog. She sits in her deck chair in her white two-piece and puts her sunglasses on. I squint up at her. "Hey, how did you really feel when I was born? Did you and your shrink tackle that one yet?"

"Sherry, I'm not going to swim if you're going to take that attitude." I feel powerful suddenly. The eggs will force her to admit that I've done something worthwhile in my life. The eggs will level out the playing field. But then she says, half-smiling in her condescending way, "But let me ask you, Sherry." She leans forward, looking down at me in the pool. "When you were born, how did you feel about seeing me at first?"

I stand up in the water. "I'm just trying to figure out your views on family, " I say. Like I don't already have a pretty good idea of what they are. "Call me crazy. Thought it might be important under the circumstances. "I can tell I hit a nerve by Barb's peeved expression. She folds her arms and sits back in her chair. I grab a pink ball that is lying near the side of the pool and toss it toward the deep end. I make a great show of lunging forward, going after it. I splash out with my hands and feet any response—anything she might have to say to me. Taking a huge breath, I go and dive under the water. I look up at the pink ball sitting on the surface. I float upwards, take a big gulp of air, thrash my arms around like someone who just fell off the Titanic. I grab the pink ball, but it moves out of my grasp. Then I stop fighting the water, and lay as still as possible face down in the pool.

No rescue efforts. I don't hear Barb saying, "Sherry, are you all right?" I don't feel my sister's arms around me, lifting my head into the air, allowing me to breathe. My lungs screaming, I finally lift my head for air and promptly begin gasping and coughing. I blink my eyes only to see a blurry Barb disappear into the house.

My sister, if she cared to look out at the pool, would see that I had survived. I float on my back. I put one of my hands on my stomach where my eggs live. Once I was in the grocery store and I broke a carton of eggs in half, just wanting to buy six. The checkout

girl with her clear skin and too much makeup gave me a snotty look and said, Hey! You can't do that here. I got to charge you for a whole. I said, I'm a single girl. I can't eat all those eggs before they go bad. No way, she said. It's called discrimination, I yelled loud enough for the whole store to hear.

I get out of the pool and can see Barb through the kitchen window holding the phone to her ear. She covers her face with one hand for a moment. I hear a couple of sharp words and then the phone slams down. I wait a minute to dry off. Then I make my way over to the screen door. The minute I open it, I hear, "You're not wet, are you?" Barb is sitting at the kitchen table. I dry my hair with the towel. "Of course not." I sit my wet butt on a kitchen chair. "Do you have any sweats I could borrow?"

Barb is looking out the window, but when I ask her this, she acts like I just asked her for her firstborn. "Let me guess, you don't have extra clothes with you?" she says in her all-knowing voice.

I suddenly feel very tired, and if I was starving before, the swimming made me that much hungrier. It is also starting to get cooler, like a storm is going to sweep across Chicago and dowse the hot steaming buildings and sidewalks. "Just my shorts, " I say, suddenly feeling miserable. In the same instant I realize I forgot to bring underwear. My skin goosepimples.

I wait. I know damn well she probably has sweat clothes in every color. It would be nothing for her to loan me a pair, but she won't. It was the same when we were growing up. Barb always had the best clothes and make up. It was even the same with Halloween candy. She was always the fairy princess or Mary Poppins with her pumpkin bucket, and I was always a gypsy girl or pirate chick, carrying a pillowcase, having lost my own pumpkin bucket years before. I usually scarfed down all my candy within two days, my stomach bloated with chocolate, exploding with sugar. Barb's candy lived on for weeks hidden in her bedroom closet where Mom and I stole from it.

Barb finally gives in when I give her my puppy dog stare. "All right, I probably have something you could wear," but the phone rings again. I dash upstairs, anxious to get out of my wet suit. The master bedroom is at the end of the hall, and I march in and open drawer. Lance's underwear. Yuck. I open another drawer. On the top of her neatly folded workout clothes is a baby magazine. A baby smiles at me. Cute little sucker too. I imagine for a moment that it's my baby from my egg. Who would you be happy with?
"I take the Fifth on that one, Lance, "I hear Barb say loudly

downstairs. Two lawyers going at it on the phone. One tripped-out

household. I grab a pair of black sweats and shut the happy baby back into the drawer. I change quickly, stealing a pair of Barb's underwear. I hear the phone slam into the receiver.

I skirt down the carpeted stairs. I know Barb would be mad at me for going through her drawers. She always was. And Mom always took her side, nine times out of ten. An now whatever she was mad at Lance about would come out at me. I am getting ready. I load my tongue like a rifle. Is that how you're going to treat the kid too? is ready to fire.

But when I walk into the kitchen, I find her at the sink, the water running over a plate. I see by her hunched shoulders that the fight really got to her. I almost feel sorry for her.

"What kind of food you got?" I say cheerfully.

She turns to me , a somewhat defeated look on her face. "What?"

"You know, dinner-grub, chow, eats." I pick an apple out of a wooden bowl and take a bite. You can't starve the kid every time you have a fight with your husband, I think. I chew the bitter bits of apple. Barb turns off the water.

"Lance is going to be late again," she says. The again part seems to come as a surprise to her. She says quickly, "Pizza? Order out?"

"Sure," I say, relieved. Barb has me call for it-anything I want on it -while she mixes drinks on the kitchen counter. She is weirdly quiet. I take another loud bite of apple while I'm on hold.

You got this big beautiful kitchen, I think, why the hell don't you cook something in it? I don't say it though. It is clear Lance has already jabbed her enough for the moment.

"I ordered extra-large," I say, when I hang up. Barb is sitting in the family room again. "Lance can have some when he gets home," I add.

She glances sharply at me. "That was thoughtful of you."

"I know," I said cheerfully. And then my resolve to be gentle crumbles. "I can be thoughtful sometimes. I'm sure he's running some poor slob criminal through the mill. Grind, grind, grind. Isn't that what you guys do best?"

I sort of hope she will laugh at me, but when she doesn't, I half expect her to throw something at me. It's not like it hasn't happened. Are you going to throw stuff at the kid too? But she says, "He's late, that's all."

"Well, well," I say. "I guess we don't have to worry about him being a father-knows-best or anything."

Barb gives me a look, like she notices me for the first time, sitting in my wrinkled T-shirt and her sweat pants, my bare feet on her beige-stripped ottoman. If I go, my eggs go.

"He doesn't work late all the time. Sometimes, Sherry, you get a case that takes extra time. You know, a little bit of extra effort. Life sometimes takes a little extra effort." She gets up and paces, her drink in her hand.

"Meaning what?" I say.

"Meaning when are you going to get a real job?"

"I have a real job," I say. "I sell stationery so people can keep in touch. That's pretty real, I would say. Oh, and then there's my artwork."

"Come on, Sheryl Lee. You have potential. Or you did. You could do something with that head of yours."

"Yeah. Like I don't do anything with my head now."

"With this money, Lance and I would give you—it would be a couple thousand—you could make a new start. Go back to school. Get yourself together."

I stand up. She is not perfect. "What the hell is wrong with your eggs, then, huh—"

"I have bad eggs," she shoots back. "Not everybody has great eggs. It's just a fact."

I sit down again and think for a minute: rotten eggs. Once I was making a cake and got ready to dump the eggs in. I cracked the first one and let it drop into the bowl. It smelled god-awful. It ruined the batter. I had to start all over.

Three grand. Rent for almost a year. New paints, Florence, even.

"Are you going to encourage this kid to fulfill her talents?" I blurt.

"Well sure, Sherry. What are you getting at?"

"Some of us in this family weren't encouraged." I get up again.

The conversation takes a familiar tack. "Talent is a natural thing," she says. "It's inherited, you either have it or you don't."

I move away from her and stare at a gaudy department-store painting of a beach scene on her wall. She probably figured it would match her new couch. And she couldn't even hang it right. "I like what I do. And I am talented." I begin to bite my lip a little. That familiar feeling comes up from my stomach. I turn to look at her. "You and mom. You guys never liked what I did."

"Oh, we never said it like that."

"But Mr. Malone liked it."

"Your high school art teacher?"

I turn to face her. "Yeah. Someone who knows."

"He used to come to class high," Barb smirks. She is nineteen again and I'm fifteen.

"He said . . . he said it was good," is what I can manage.

"Stoney Maloney." Barb looks triumphant.

"He never, ever lied to me or to anyone in the class. He knew what wasn't good and what was. And he thought I was good!"

"I'm sure he didn't lie. He probably just sniffed too much turpentine." She walks over to the window and pulls back the curtain. "I don't even think the old boy is there anymore."

"He said I was good!" I scream the last word extra loud across the family room.

The doorbell rings.

"Saved by the bell. Pizza time," Barb says. She picks up her purse off the end table and goes to answer the door.

The doorbell rings again before she gets there. I shut my eyes and imagine another scene, a scene from the future. I come to the front door and stand there, ringing the doorbell. Barb answers and motions for me to come in. A little brown-haired girl stands on the stairs behind her. She is wearing tiny overalls and a pink shirt. She has a piece of paper in her hand.

"Chelsea, look who's there," Barb says to her.

"Hi," the little girl says shyly to me.

"Hi there," I say. I stoop a little so that I'm looking at her. The little girl smiles back at me. I smell her hair as I give her a hug. Her big brown eyes mirror my own. Her tiny fingers grip the corner of the paper as she offers it timidly to me. It is a drawing. It is a drawing of a house—colored with beautiful, bright greens, reds, and blues, under a big yellow sun. "So baby," I look away from the drawing and back at her, my voice stuck in my throat. "So baby, I see you drew something nice."

## Demons of Winter (Демоны Зимы)



Гроза бушевала непрерывно, но пятнадцатилетняя Катя не замечала холодного дождя, который струился по её печальному лицу, потому что её щёки были уже мокрые от слёз. Она не замечала ни колючек которые царапали её ноги, ни того, что её губы дрожали от холода и страха, когда она кричала "Киса, киса, сюда!" Когда стало темнеть, она хотела чтобы её дорогая, потерянная кошка не была бы черного цвета. Но она успокоилась, когда услышала слабое"мяу", раздавшееся пол её ногами. С кошкой в руках, она пошла домой. С радостью она убежала от грозы и вошла в удобный дом, где она увидела собаку, спящую перед камином, старую знакомую мебель и спокойное выражение лица седобородого папы. Но мир был разрушен сердитыми словами матери: «Мы страшно беспокоились. Почему ты не сказала нам, что ты идёшь на улицу во время грозы?» Не подумав, она ответила: «Мне жизнь моей кошки важнее, чем ваши заботы. И также я вспомнила то, что Владимир сказал мне, что легче получить прощение, чем разрешение!» «Ах, Владимир!» её мама почти вскрикнула в гневе: «Он только беда для семьи. Если ты хочешь быть гувернанткой в такой богатой семье, надо не встречаться с ним.» «Катя, ты дрожишь», сказал папа. «Переоденься.»

Катя с радостью убежала из комнаты, но слушала разговор родителей. «Ольга! Может быть она не хочет быть гувер-

нанткой, как её двоюродная сестра Вера. Кате только 15 лет, она любит свободу, природу, животных, независимость; она умная. Разреши ей выбрать свой путь в жизни.» «Павел, будь реалистом. Мы небогаты. Если она читает высокую литературу, говорит свободно по-французски и ведёт себя, как утончённая дама, она сможет достичь хорошей жизни в качестве гувернантки. Но если она подружится с Владимиром, она будет дика, как он. Вера часто говорила мне о нём. Он умный, у него хорошее образование, но он бунтарь, не хочет наследовать имение. хочет путешествовать в дальних краях. Ему 18 лет; скоро он уезжает. Его мама всегда спрашивает: «Почему он не как старший брат Антон?» Скоро Антон женится на Любови Петровне. Какая прекрасная дама!» Слушая этот разговор, Катя вспомнила свою первую встречу с Владимиром год назад, когда её пригласили на бал. Ей было скучно на балу. Она тихо бродила и разглядывала изумительный, богатый особняк. Услышав музыку, она приставила ухо к двери комнаты, из которой исходила музыка. Вдруг, позади себя она услышала голос молодого человека: «Откройте дверь тихо» -- сказал он шепотом--«Дедушка причудливый в старости. Если он услышит Вас, будет сердиться.» Но скоро старик вышел через другую дверь. Молодой человек распахнул дверь, говоря: «Вы двоюродная сестра Веры, да? Она сказала, что Вы любите играть на рояле. Играйте!» Катя стояла перед самым великолепным фортепиано, которое она когда-либо видела в жизни, и она стала играть. Скоро она вошла в свой мир, где жили только она и музыка. Она была так поглощена в глубокие звуки ре-минорой сонаты Бетховена, что не заметила того эффекта, который произвела её игра на Володю. Он стоял тоже в своём мире, мире тайны и мрака, вызванном её чувствительной, страстной музыкой. Когда она перестала играть, и звук замолк, он почувствовал, что тонкая нитка связала их души. Изумлённый молодой человек уставился на девушку: стройную, утончённую, с тёмными, длинными волосами и большими чёрными глазами--губокими и страстными, как её сердце, проявившееся в музыке. Когда она встала, намереваясь выйти, он импульсивно сказал: «Не уходите. Смотрите, как много интересных книг у дедушки...хотите видеть мою любимую?» «Конечно, но надо получить разрешение? Ведь, Вы сами сказали, что он причудливый!» «Легче получить прощение, чем разрешение!» ответил он, открывая изумительную книгу со многими картинками, изображавшими горы в Америке. «Я хочу быть альпинистом в будущем. Хочу исследовать дальние края...» Она перебила его: «Но у Вас есть такой роскошный дом, такая симпатичная семья, живёте на широкую ногу.» «Я устал от этого! Это только бремя для меня!» Он внезапно вышел из комнаты, смутившись тем, что показал своё мучение четырнадцатилетней девочке. Вспоминая эту сцену, Катя улыбалась. Володя и она стали

друзьями и проводили время в молодых проказах. Но ей оыло интересно, прав ли он или нет? Разве семейное счастье--бремя?

Прошло 4 года. Однажды, когда Катя вернулась с прогулки по лесу, Ольга сказала ей «Слава Богу! Антон послал за тобой! Можно надеяться, что он хочет нанять тебя гувернанткой для его сироты дочери. Ты знаешь как он любил Любу. Когда она умерла, говорила Вера, он был вне себя от печали. Иди к ним сейчас!» Когда Катя пришла, Антон нервно расхаживал по саду, а увидев её, лицо его оживилось. Он сел на скамейку и, приглашая её сесть рядом с ним, сказал: «Моя дорогая Катя, я хочу Вам что-то сказать...очень важное...трудно сказать...можно надеяться...» « Вы хотите нанять мен гувернанткой для дочери?» Она старалась помочь косноязычному Антону. «Гувернанткой?» он нервно засмеялся и взял её за руку. «Я делаю Вам предложение! Хочу жениться на Вас!» Она уставилась с недоверием, не зная, как ответить. Катя чувствовала, что она любила не Антона, а его брата. Но два года назад Володя уехал и стал офицером на Кавказе. Он написал ей несколько писем, в которых он описывал природу, горы, интересных людей. Ему особенно понравился отпуск, когда он взобрался на гору Эльбрус. Он писал: «Раньше я видел эту гору, как снежную деву, благословляющую бесплодную, сухую равнину у подножия. Но пока я не поднялся по её белым плечам, я не верил, что небеса действительно существуют. Я увидел вершины облаков сверху и услышал слова Лермонтова: «На воздушном океане, Без руля и без ветрил, Тихо плавают в тумане Хоры стройные светил; Средь полей необозримых В небе ходят без следа Облаков неуловимых Волокнистые стада. Час разлуки, час свиданья Им ни радость, ни печаль; Им в грядущем нет желанья И прошедшего не жаль. В день томительный несчастья Ты об них лишь вспомяни; Будь к земному без участья И беспечна, как они!» Там. окружённый снегом и ветром, я чувствовал себя первый раз в жизни совсем живым.» Читая эти слова, Катя очень хотела принимать участие в тех же приключениях, но она была уверена, что Володя не возвратится, и он никогда не говорил ни одного слова любви. «Катя. извините. Мои слова были невежливы. Но я так люблю Вас; для меня Ваше положение в обществе не важно. Вы мне нужны как жена, а не как гувернантка. Можете ответить мне?» «Я...я...не знаю. Надо поговорить с родителями.» «Конечно. Но долго ждать не могу. Не мучьте меня.» Как она предполагала, её папа сказал: «Решай сама.» А её мама спросила: «Почему ты сомневаешься? Он богатый, красивый. симпатичный. Это твоя единственная возможность в жизни достичь такого высокого положения. Это не только для тебя--для папы и для меня тоже. Мы старые, небогатые, будем бедные в старости. Если ты откажешь ему...» Ольга онемела при мысли об отказе. А её дочь

видела перед собой свою жизнь: удобную, но ровную, как равнина у подножия Эльбруса.

Прошло два года. Катя поцеловала свою годовалую дочь Анну и вышла из дома, думая о своей жизни. Дочери она не нужна, няня заботилась о ней; милый, скучный Антон был доволен семейным счастьем. Сначала, после свадьбы, Катя была очарована изящным домом, изумительным фортепиано, слугами и внимательным мужем. Но скоро, жизнь высшего общества стала ей казаться пустой, состоящей из бесконечных вечеринок и бессмысленных салонных разговоров. Она предполагала, что, когда ребёнок родится, всё будет хорошо. Но после рождения Анны, подавленность глодала душу Кати. Её изящный дом стал её тюрьмой, её душа умерла. Часто она скиталась час за часом одна в лесу, стараясь убить боль в душе изнурением.

Однажды, удивив семью, Володя вернулся; его военная служба закончилась. Он совсем не узнал Катю, такой печальной была она. «Что с тобой?» спросил он, когда они гуляли вместе. Он так сочувственно вёл себя, что она разразилась слезами. «Не знаю! Меня гложут мрачные образы. Я сейчас без страсти, без наслаждения, даже без надежды, но почему? Я богатая, у меня добрый муж, милая дочь, но мне кажется, что счастье только заблуждение. Мой изящный дом--моя тюрьма; моя душа мертва; я не могу чувствовать любовь, даже к дочери. Какая я мать? Какая жена? Бес вселился в меня. Моя жизнь хуже, чем сама смерть.» «Катя, слушай меня! Мир сейчас такой же, как раньше—ты помнишь первый раз, когда мы встретили друг друга? Когда ты играла на фортепиано и околдовала меня? Я сочувствую тебе, потому что я сам так чувствовал себя, и смутился, показав тебе боль в душе...» «Как я сейчас!» сказала она, улыбаясь, как она давно не делала.

Катя оживлялась в присутствии Володи. Она видела красоту в цветах осени и наслаждалась его рассказами. Её любовь к нему, давно уснувшая, вернулась с такой мощью, что она испугалась и не могла признаться даже себе в её существовании. Но с начала зимы Володя разрушал её возвращающееся счастье, говоря, что он принял решение. Катя играла в снежном саду с Анной, когда он пришёл к ней. Он стоял перед ней, молчаливый и серьёзный. «Катя, я не могу так жить—ты понимаешь меня. Я решил уехать в Америку, где человек может дышать, где воображение может стать реальностью...» Он продолжал говорить, но она не слышала. Всё было как во сне. Она стала неподвижной и побледнела. Он схватил её перед тем, как она потеряла сознание. Он посмотрел вокруг; не увидев никого, обнял её. «Катя, я люблю тебя больше чем саму жизнь! Уезжай со мной. Мы начнём новую жизнь, которая не будет зависеть от положения в обществе; мы будем подниматься в горы вместе, увидим «облака неуловимые»,

построим сами свой маленький дом, и достигнем настоящей свободы в новой стране.» «Володя, не мучь меня. Я любила тебя с тех пор, как я тебя встретила. Если бы ты так сказал мне раньше, перед венчанием, всё было бы по-другому. Но теперь я жена твоего брата. Он и дочь заслуживают права иметь преданную жену и маму. Антон достаточно мучился смертью Любы.» Анна, чувствуя огорчение своей мамы, стала плакать. Катя старалась освободиться от него и держать плачущего ребёнка. Володя, видя, что он терял её, изпользовал своё последнее оружие. «Антон никогда не любил тебя, ему нужна была мать для дочери, когда Люба умерла.» Катя вспыхнула злостью, и, сказав «Я не верю тебе! Не верю! Уходи отсюда!», убежала с дочерью в дом.

Но Катя знала, что он был прав. Она никогда не чувствовала любви со стороны мужа, но слепо верила ему. Ведь он был добрым и верным, и защищал её от критики его родителей, когда они делали замечания о положении её семьи в обществе. Два дня Катя и Володя избегали встреч друг с другом. Тем временем, он заявил семье о своём предстоящем отъезде, с которым они смирились, несмотря на то, что они никогда больше не увидят его. На третий день, Володя тайно следуя за гулявшей в лесу Катей, перехватил её, говоря: «Извини, пожалуйста. Я говорил жестоко. Завтра я уеду. Я надеюсь только, что ты сможешь помнить меня с любовью.» «Володя, наши души соединены. И я знаю, что ты прав насчёт брата. Он любит меня только как друга, а не со страстью. Но всю жизнь я уважала честность и честь, больше чем всё другое. Это всё, что остаётся у меня в этой пустой жизни. Если я оставлю мужа чтобы уехать с его братом, он не выстерпит позора, не сможет жениться опять. Это моя судьбасуществовать честно и жить только в грёзах. Я не могу иначе.» Чувствуя её борьбу, он спросил: «А куда твоя честь ведёт тебя? В яму ада? Ты сама сказала мне, что женщина с мёртвой душой не может быть преданной женой и матерью. Это только твоё заблуждение, что ты можешь так жить.» «А Анна? Я хочу, чтобы она знала природу, свободу, а не ограниченное существование высшего общества.» Он ответил: «Ты не можешь бороться с обществом. Анна сама должна решить для себя. Верь мне-я знаю. Поэтому я уеду. Я долго думал о нас. У нас будет тайный план действий. Я слышал как Антон и родители поговорил тебе, что ты подвергаешь себя опасности гуляя одна в лесу. Это навело меня на мысль. Завтра я уеду и подожду тебя в городке Н\*\*\*, недалеко отсюда. Через два дня ты должна уйти одна, как обычно. Мы встретимся и уедем в Америку вместе. Все будут убеждены, что ты погибла. Катя, мы должны по собственной воле решить свою судьбу.» Её отчаянная борьба с обманом была тщетной, и она согласилась.

Через два дня Катя последний раз поцеловала спящую Анну и

молча вышла. Несмотря на неспокойную совесть, она видела впереди не мрачную равнину, но сияющие, заснеженные горы и неуловимые облака; она слышала слова: «В день томительный несчастья Ты об них лишь вспомяни; Будь к земному без участья и беспечна, как они!»

Сначала, поездка Кати и Володи была совсем прелестной. Они радовались тому, что они были в конце концов вместе, радовались свободе и красоте захода солнца, который раскращивал искрящийся снег. Но скоро они столкнулись с трудностями. Приехав на станцию поздно вечером, они узнали, что смотритель станции был пьяный, и что лошалей не было. Не захотев остаться с ним, они решили идти пешком в следующий городок, на 25 вёрст дальше. Они были полны энергии, и Катя уверяла Володю, что она много раз ходила пешком даже дальше, чем на 25 вёрст. Погода была ясная, но когда стало темнеть, начался ветер. Скоро дорогу занесло и идти стало очень трудно. Они храбро продолжали уходить в ночь. Но мало-помалу ветер, как вор, крал теплоту из их тел, и Катя начала шататься. Володя поддерживал её на руках; но его усилия были тщетны; она совсем замучилась. «Мне так холодно, Володя. Давай отдохнём минуточку.» Она легла на снег, говоря: «Снег мягкий как подушка под головой. Отдохни со мной...» Он закричал: «Не сейчас, моя дорогая! Смотри-небо на востоке начинает бледнеть.» Она оживилась немножко: «Это наш рассвет, наша надежда! Скоро будет светло!» «Нет, это луна, наша красивая луна, которая освещает нашу дорогу к свободе.» Он схватил её за руку, и умолял её: «Вставай!» Она постаралась, но всё было напрасно. Мысли о неизбежном конце охлаждали сердце Володи. Он лёг рядом с ней, но она сказала слабым голосом: «Ты можешь продолжить путь, и жить, милый мой. Тебе не надо разделять мою судьбу.» «Я всегда решаю свою судьбу по собственной воле. И теперь, я выбираю быть с тобой, с моей единственной любовью.» Она бормотала: «А это моя судьба, быть честной; я заставила их верить, что я замёрзла в снегу, и теперь это правда.» Её глаза закрылись: «Мой дорогой Володя, ты знаешь, что я вижу? Мы вместе на горе...под нами облака...«В небе ходят без следа Облаков неуловимых Волокнистые стада.» Со слезами он сказал: «Теперь я знаю...я демон, о котором Лермонтов написал. Я привёл тебя к этой судьбе.» «И я благодарю тебя. Здесь, с тобой, в твоих руках, я чувствую себя первый раз в жизни совсем живой...» Её голос замолк, и тихо, нежно, лунный свет и снег покрыли несчастных влюблённых.



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