Are Attachment Scripts the Building Blocks of Attachment Representations?
Narrative Assessment of Representations and the AAI

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Approximately fifteen years ago, attachment research took a turn toward cognition and issues of representation (Main, Kaplan, & Cassidy, 1985). The adult attachment interview was developed in order to tap into individuals’ internal working models and the coherence of their attachment representations. Furthermore, an empirical link was established between security classifications on the interview and the adult’s relationship with their child suggesting that working models directed the individual’s interactions with their child. More recent findings have established a link between early attachment assessments at 12 – 18 months with the strange situation and security in early adulthood as assessed by the interview (E.Waters, Merrick, Treboux, Crowell, & Albersheim, 2000)

In this empirical context, the nature of attachment working models and how they develop is critical for understanding these findings and for suggesting mechanisms responsible for the cognition-behavior connections that have been reported.
For example, Bretherton (1991) has proposed that attachment scripts are the cognitive building blocks of attachment representations.

In support of this hypothesis, H. Waters, Rodrigues, and Ridgeway (1998) reported that narrative techniques designed to tap into children’s attachment scripts revealed that secure children are able to produce more coherent, more elaborate attachment-relevant narratives. Similar narrative techniques with adults should reveal similar patterns as well if attachment scripts are the cognitive building blocks of attachment representations.

Seeking evidence of attachment scripts in adults, we introduced a narrative technique designed to obtain attachment relevant stories from adults. Four prompt word outlines were developed to guide story productions about attachment relevant scenarios, two mother/child scenarios (Baby’s Morning, The Doctor’s Office) and two adult/adult scenarios (Jane and Bob’s Camping Trip, The Accident).
Two neutral, non-attachment story lines were also included in the story battery. Scriptedness was defined in terms of a prototypic attachment script in which the secure base (mom/partner) helps the individual (character in story) deal with some distress and helps to get things back to normal.

In a pilot sample of 16 adult women and a replication sample of forty, we first compared scriptedness scores across attachment narratives to determine whether there was evidence of a generalized secure base script. Secondly, we compared scriptedness scores with coherence scores from the Adult Attachment Interview (AAI) to determine whether AAI coherence reflects knowledge and access to a generalized secure base script. A measure of IQ was also included to establish that the word prompt technique doesn’t substantially tap general verbal ability.
**Participants**

Women who had previously been assessed for security using the Adult Attachment Interview (AAI) were recruited for this study. All of the women were long-term participants in the Stony Brook Relationship Project.

**Narrative Assessment Procedure**

Participants were asked to produce six stories from prompt word outlines that suggest a story line. The set of narrative prompts included four attachment relevant scenarios, two mother/child scenarios (Baby’s Morning, The Doctor’s Office) and two adult/adult scenarios (Jane and Bob’s Camping Trip, The Accident). Two neutral, non-attachment story lines were also included in the battery (Trip to a Park, An Afternoon Shopping).

Participants were asked to use the columns of words to frame a story, going from left to right. The prompt words are only a guide and elaborations are welcome. After reviewing each outline, and the participant indicates that they are ready, a tape recorder is turned on and the generated passage is recorded. Participants do not have difficulty in understanding the prompt word procedure, or in following the implied story line.
**Testing the Generalized Secure Base Script**

**Hypothesis: Convergent-Discriminant Validity**

**Research Design**

<table>
<thead>
<tr>
<th>Secure Base Related Prompt-Word Sets</th>
<th>Non-Attachment Prompt-Word Sets</th>
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<tr>
<td><strong>Mother-Child Sets</strong></td>
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<tr>
<td>“Baby’s Morning”</td>
<td>“An Afternoon Shopping”</td>
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<td>“Doctor’s Office”</td>
<td>“A Trip to the Park”</td>
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<td><strong>Adult-Adult Sets</strong></td>
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<td>“Bob &amp; Jane Go Camping”</td>
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<tr>
<td>“The Accident”</td>
<td>Verbal IQ</td>
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# Mother-Child Attachment Narrative Word Prompts

## A. Baby’s Morning

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<thead>
<tr>
<th>mother</th>
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<td>lost</td>
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<tr>
<td>play</td>
<td>story</td>
<td>found</td>
</tr>
<tr>
<td>blanket</td>
<td>pretend</td>
<td>nap</td>
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</table>

## B. The Doctor’s Office

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<tr>
<th>Tommy</th>
<th>hurry</th>
<th>mother</th>
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<tr>
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<td>doctor</td>
<td>toy</td>
</tr>
<tr>
<td>hurt</td>
<td>cry</td>
<td>stop</td>
</tr>
<tr>
<td>mother</td>
<td>shot</td>
<td>hold</td>
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</table>
Adult-Adult Attachment Narrative Word Prompts

C. Jane and Bob’s Camping Trip
Jane  tent  campfire
Bob   wind  shadow
bags  collapse  sounds
hurry upset  hug

D. The Accident
Sue   wait  home
road  Mike  dinner
accident  tears  bed
hospital  doctor  hug
**Definition of a Secure Base Script**
The prototypic secure base script describes a sequence of events in which the caregiver (1) supports the child’s exploration, (2) remains available and responsive and serves as a resource as necessary; (3) the child encounters an obstacle or threat and becomes distressed; (4) either the child retreats to the caregiver or the caregiver goes to the child; (5) the difficulty is resolved or removed; (6) proximity and/or contact with the caregiver effectively comforts the child; (7) the child (possibly with the caregiver’s assistance) returns to constructive play (or ends play comfortably and makes a transition to another activity).
Content of A Generalized (Dyadic) Secure Base Script

Constructive engagement → Obstacle → Need help
Sub-script:
- Signal
- Seek proximity
- Detect signal
- Interpret correctly

Help offered and effective → Comforting
Sub-script:
- Offered
- Accepted
- Effective

Constructive engagement re-establish
Secure Base Script Content (Adult Attachment Narratives)

Once again, we broadly define a prototypic secure script as one in which the secure base (mom/partner) helps the individual (character in story) deal with some distress and helps to get things back to normal. In more positive scenarios, the goal of the secure base is to facilitate exploration, promoting positive experiences. Stories organized around a secure base script will have:

1) the secure base helping to select and implement strategies for getting things back to normal and defusing the emotional distress, when that is possible, or avoiding distress altogether by facilitating transitions to other activities (for a baby or child) and providing explanatory frameworks to help understand the situation (for young child)

2) the secure base reconfiguring the person’s representation to focus on more positive aspects, thereby diffusing the negative emotion. This often involves pointing out the “bright” side of a situation, e.g., we’ll certainly talk about this trip for years to come.

Continued next slide
3) an interpersonal focus, that is, a sensitivity to and awareness of the other person’s psychological/emotional state. The content of secure base narratives focuses on the interaction between the two individuals rather than simply describing the sequence of events in the story. The secure base responds to requests, cues from child/partner, modifying their own behavior as a consequence. There is give-and-take, with each partner making their own unique contribution to the situation, activity, but working together “as a team.” There is also emotional give-and-take with an expressed emotion in one leading to an emotional response in the other.
Secure Base Script Rating Scale

1. These are the very best examples of secure base content in the narrative. There is a rich interplay between the two principle characters. There is a great deal of attention to the psychological state of the other, and the “secure base” is very responsive to that psychological state. Important to the secure base script is the resolution of the problem/distress with a return to normalcy.

2. These narratives fall short of the richness of secure base content that is evidenced in stories ranked “1”. Nonetheless, these stories to contain a reasonable amount of secure base content.

3. These narratives have a medium amount of secure base content, but not as much elaboration as those that are ranked “1” or “2”.

4. These narratives have some secure base content, but not very much. Thus, they are weak on secure base content, but there is no odd content contained in the story either.
5. These narratives seem mostly event-related stories, in which what is happening is presented, with very little commentary on the give and take between with the characters, or on the psychological content of the story.

6. These are event-related as well, but so brief as to seem disjointed. Also included in this category are narratives that contain some odd content that is inconsistent with a secure base script. The intrusion of this content however is not as consistent or pervasive as the narratives that are scored “7.”

7. These narratives are theme-based variations that come across as quite peculiar interpretations of the implied story line. Not only is the secure base script not recognized, but a quite different script is in its place. The narratives can be quite detailed, with content generated consistent with the odd interpretation of the story line. These are not that common. Narratives that have significant “odd” content, but fall short of a complete theme-based variation also receive a “7.”
Sample Narratives

Baby’s Morning – Rich Secure Base Content

The brand new mother woke up to her little baby’s cry. And she went running into the baby’s room to see what was wrong. And actually, the baby was crying with happiness cause she was playing in her crib and she was playing with the brand new toy that her father had given her. The blanket that was generally around the baby was tied over the toy, and the baby was actually pretending that this doll was her little baby. So she was hugging it, and her mom just smiled, cause she thought this was so cute. The little baby, Sarah, wanted to give her mom a hug also. So she reached up and gave her mom a really big hug. And this made her mom smile even more. So then she wanted to hear a story. And the story was ‘Goldilocks and the three bears.’ And Sarah started laughing because her mom would pretend to be each of the bears. So she would say, “Oh, I’m Papa Bear,” in this low and deep voice, “and whose been sleeping in my bed.” And Sarah thought this was the funniest thing cause her mom had this really deep Papa Bear voice and then she’d have the little Baby Bear voice., “Oh, someone’s been sleeping in my bed, and she’s still there.” So the little Sarah was very happy with her mom’s story. And she played for most of the day while her mom watched her and played with her. And she had her favorite gift from her big brother was a teddy bear that was lost and she couldn’t find it anywhere. She looked up and down the stairs and she looked in her room, and she looked in her brother’s room, but she couldn’t find it anywhere. But her mom said, “Well, let’s think really hard. If I was a teddy bear where would I be?” And they thought, and they thought and they thought. “I know, I know, it would be in my bed.” So Sarah went running up the steps, toddling up the steps, and there they found the teddy bear, laying in her bed where she had left him. So she was so tired that her mom said, “Why don’t we both lay down for a little nap?” And Sarah and her mom took a nap for the rest of the afternoon.
Baby's Morning – Minimal Secure Base Content
Early one morning, the father went to pick up the baby from the crib. Brought him in to the mother, laid the baby in the bed with the mother and went off to work for the day. The mother and the baby spent some time nursing, then they were laying in bed, playing. Playing peek-a-boo with the little blanket. Lots of hugs. Trying to get the baby to smile, the mother was telling her little stories and pretending she disappeared behind the blanket, she would reappear, and the baby would give big smiles for that. They then got up, left the bed and went into the kitchen and they found the baby's, one of the baby's favorite toys, the teddy bear. They played with the teddy bear for a little while, pretending they were feeding the teddy bear while the mother fed the baby her breakfast and shortly after that the baby went in for a nap.

Baby's Morning – Matter of Fact Presentation of Events, No Psychological/Emotional Emphasis
It was morning time when the mother heard her baby crying. She went to get the baby, fed her break-fast, and then they proceeded to play on the baby's favorite blanket. The mother loved the baby, she hugged it, she smiled with it, she read it stories. The mother pretended that she was a teddy bear, and she would hug the baby and sing it songs. One day the teddy bear got lost. The mother looked all over for it. The baby was crying. But when the mother found the teddy bear, the baby was ready for her nap.
Baby’s Morning – No Secure Base Script, Mother is Focus of Story
I’d like to explain what my morning is like. Since I’m a working mother, it’s kind of difficult for me to get the baby ready in the morning. A lot of times he wants to play, so it really takes up a lot of time in doing my routine. But what I usually do is I try to wrap him up in the blanket, and give him a big hug and then off we go to the babysitters. I try to smile a lot as I’m dropping him off, and as he’s getting older now, we’re trying to make up stories about where I’m going, and I try to explain to him where I go to work, and what I do. And a lot of times I have to pretend that I’m not leaving. And we have to distract him a little bit, so that I can get out of the house. And the other day, it was so traumatic because I had dropped off his teddy bear with him, and then when she, the babysitter, gave him back to me, we couldn’t find the teddy bear. So we thought it was lost but maybe some of the other kids had taken him home. Luckily we were able to find him. So once the teddy bear was found, everything was good, and I was told that now that he’s able to take his nap better, because without the teddy bear, during the day he wouldn’t sleep, so his nap time was kind of messed up. So this is how baby’s morning goes with me.
Tommy was really excited. He got this mountain bike that he had been wanting for ever and ever and ever. And he had worked so many summers cutting the lawn that he was able to save up and buy his new bike. So this is the first day that Tommy was able to ride it. He gets on his bike and he’s going over moguls, and through the woods. All of a sudden, he hit a big tree stump and he fell off and he hurt his leg. It hurt so much. So Tommy was in the middle of the woods, he wasn’t sure what to do. And he said, “I have to get to my mother. I have to hurry up and get home to my mother.” So Tommy, very carefully, got back on his bike and started to pedal. But it still hurt him a lot. So when he got home, Tommy said, “Mom, I think I hurt my leg.” And his mother looked at it and said, “Oh, I think we’re gonna have to take you to the doctor.” And Tommy started to cry out, “No, not the doctor. He’s probably gonna give me a shot. I don’t wanna shot mom, please, please.” But Tommy’s mother said, “No, I think we’re gonna have to take you to the doctor.” So they went to the doctor’s office, and yep, he needed a tetanus shot, because part of the bike had scraped his leg. So, Tommy was such a big boy, though, that he made his mother proud, and said, “Okay, I’ll be really good mom I promise.” And his mother was so happy with him that she said, “Okay, we’ll go to the toy shop and we’ll be able to pick up a toy that you might like as a reward for being so good.” So, Tommy started running as fast as he could to the toy shop. And his mother yelled, “Stop right there. Don’t cross the street.” So Tommy waited for his mother. And he took her hand, and his mother held his hand. And they went to the toy store. Tommy picked out the toy that he wanted, a brand new bike. He picked out his brand new bicycle and he left the store holding his mother’s hand.
Jane and Bob’s Camping Trip – Rich Secure Base Content

Jane and Bob couldn’t decide where to take their yearly vacation. Jane wanted to go to a beach resort, but Bob had his heart set on camping. He couldn’t convince Jane to change her mind. He brought home brochures and used his best tactics to convince her. Jane just couldn’t get used to the idea of not having all the amenities she was used to. Finally she gave in, because she knew it was Bob’s true desire. He packed their bags in a hurry before she could change her mind. When they got to the campsite Bob set up the tent. They went for a long stroll in the woods and when it was time for dinner they set back for their tent. The weather began to change very quickly. The wind kicked up and the sky grew dark. Jane was very frightened. They went into the tent to take shelter because the rain was coming down hard. Bob did his best to comfort Jane. With one very strong wind, the tent collapsed right on top of them. Bob was more upset because the camping trip was not what he had promised Jane that it would be. They ran to the nearest shelter and soon the weather became nicer. Bob was apologizing to Jane that he would make everything right, and he promised himself that he would make it right for her, because she had agreed to come. After they got the tent set up ... they worked together to set it up, and Jane was really enjoying herself. She told Bob that it was more that they were together than where they actually took their vacation. As the night went on, they had a roaring campfire, and they toasted marshmallows, and just sat beside each other. The shadow of the fire cast a warm glow on the campsite. The sounds of the crickets and the wind in the leaves were all very romantic, and Jane agreed that this was the perfect vacation. Bob thanked Jane for agreeing to come, and Jane thanked Bob for showing her that camping could be a good vacation as long as they were together. The night ended with a big hug and they went into their tent.
The Accident – Rich Secure Base Content

Sue was racing home from work with groceries in the car because she was ready to make dinner. She wanted to have a special dinner for Mike when he got home because he had just gotten a big promotion at work. Well the weather had turned ugly, and it started to rain. While Sue was driving on the road there was an accident she had with another car. Luckily it wasn’t serious, but just to be on the safe side the policeman said that, “I would recommend you going to the hospital to just check out those bruises that you received.” So Sue went to the hospital. She got checked out by the doctor. She waited in the waiting room for Mike to get there. When Mike arrived, Sue had tears in her eyes because she was very shaken by the accident. The doctor said “There’s nothing to be worried about. Everything will be okay. Sue will just need to have some rest and relaxation for the next few day.” So Mike went over to his wife, gave her a really big hug, and said, “Why don’t we go home honey?” And on the way home, Sue remembered that all the food for dinner was in her car that was towed away to the repair shop. Seeing as they had nothing in the house to eat, they both made a big bag of popcorn, and they had a can of Kool Aid that was left over in the refrigerator. Afterwards they went to bed and Sue said, “I’m so sorry. I planned this really big dinner for you.” And Mike just gave her a really big hug, and said, “The best kind of gift I have is you, home safe with me.”
Predictions From The Generalized Secure Base Script Hypothesis

**Premise 1:** Secure base experience is represented as a single generalized script.

**Premise 2:** Passages generated from secure base prompt-word sets reflect knowledge and access to a generalized secure base script.

**Predictions:**

1. Scriptedness of mother-infant passages will be highly correlated.

2. Scriptedness of adult-adult passages will be highly correlated.

3. Scriptedness of mother-infant and adult-adult prompt-word sets of correlated.

4. Scriptedness of attachment-related passages will not correlate with scriptedness of non-attachment passages.
A Generalized Secure Base Script or Separate Scripts For Different Relationship Types?

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<tr>
<th>Convergent Validity</th>
<th>Scriptedness</th>
<th>Discriminant Validity</th>
<th>(General Storytelling Ability)</th>
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<tr>
<td>Within Child-Adult stories</td>
<td>.93</td>
<td>.21</td>
<td>Adult-Adult vs. Non-Attachment stories</td>
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<tr>
<td>Within Adult-Adult stories</td>
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<td>Across Child-Adult and Adult-Adult stories</td>
<td>.93</td>
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Pilot sample n=16 Replication n=40
# Does AAI Coherence Reflect Knowledge and Access to a Generalized Secure Base Script?

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<th>Prompt-Word Set</th>
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Discussion
The current study produced a number of key findings that bear on the generalized secure base script hypothesis, i.e., that a single, general purpose, abstract secure base script organizes a secure person’s conceptualization of past attachment experience.

- There are strong individual differences in knowledge and access to a child-mother secure base script. Secure women were more likely to produce mother/child narratives that followed a secure base script.

- There are strong individual differences in knowledge and use of an adult-adult secure base script. Secure women were more likely to produce adult/adult narratives that followed a secure base script.

- The same script organizes behavior in both domains. As the correlations to the left indicate, scriptedness scores on the adult/adult and mother/child narratives correlate highly. In addition the stories within each category correlate highly. These patterns of correlations are indicative of a single, generalized script.
- The prompt word method does not substantially tap general verbal ability. Secure base scriptedness scores were not correlated with the “park” or “mall” script contained in the two neutral (non-attachment) stories. Nor were they correlated with the Henman-Nelson test of mental ability.

These findings demonstrate the usefulness of a narrative assessment technique to examine the cognitive underpinnings of adult attachment representations. Furthermore, the fact that AAI coherence substantially reflects knowledge and access to a generalized secure base script sets the stage for testing a wide range of hypotheses about attachment representations, their origins and the mechanisms by which they change with development.

This study represents the first time that specific cognitive features (secure scripts) have been directly linked to secure attachment in adults. The secure base script has already been linked to child security in the Waters, Rodrigues, and Ridgeway (1998) reanalysis of children’s story completions from the Bretherton, Ridgeway, and Cassidy (1990) narrative attachment study. This important parallel supports the hypothesis that attachment scripts underlie attachment representations from childhood to adulthood.
Key Conclusions

- Representation of early secure base experience in the mind.
  - Script-like
  - Dyadic
  - Generalized

- AAI coherence substantially reflects knowledge and access to a generalized secure base script.

- Prompt-Word Outline method can be used to examine a wide range of hypotheses about attachment representations and proposed attachment measures.

- Future research should pursue how this link from childhood to adulthood is maintained. Given the established link between mother security and child security, it seems likely that secure parents actively transmit the secure scripts that are the building blocks of secure attachment representations. Different communication styles of secure and insecure parents should be anticipated and documented.