

# **The Positioning Theory Diamond as Analytic Tool to Examine Multimodal Social Interaction in an Engineering Club**

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This paper presents a conceptual and methodological adaptation of the Positioning Theory diamond as originally proposed by Slocum-Bradley (2009). The authors propose an updated graphic representation that foregrounds the diamond in moral fields within arrays of identities and relationships that are not bound by space and time. The positioning diamond is illustrated as an analytical, research tool by applying it to study the social interactions, including multimodal interactions, of children (ages 7-10 years) in an afterschool engineering club. The paper illustrates how the authors applied the Positioning Theory diamond jointly with Bamberg's three-tiered positioning analysis and multimodal analysis to develop a clearer perspective on one particular learner. The authors argue that scholars of positioning theory should look to studies of multimodality to deepen their analysis of speech *and other acts*. Multimodal analysis and the Positioning Theory diamond can be used effectively to explore social interactions in addition to speech.

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Keywords: positioning theory, positioning diamond, engineering, Bamberg,

Slocum-Bradley (2009) has proposed the positioning diamond as a transdisciplinary framework that can be used by social scientists analyzing discourse using Positioning Theory (PT). In our conceptual and methodological paper, we revisit and adapt the PT diamond and provide a data-based illustration of the diamond applied not only to speech but also to other communicative modes (e.g., gesture, artifact manipulation, gaze, etc.). While positioning theorists have repeatedly noted that speech is not the only vehicle for positioning, it is the most often studied. Scant attention has focused how other semiotic means (e.g., images, color, gesture) also position interactants (McVee & Carse, 2016). Using the PT diamond, we trace how positions are constructed and represented not only through speech but through speech *and other acts*.

To broaden analysis beyond speech and to include other modalities and artifacts, we drew upon data from an afterschool engineering and literacy club for elementary students. These students, aged 7-10 years, met for an hour afterschool in their school library for four to six weeks. Students entered Engineering Club in third grade and some continued to participate in Engineering Club in fourth and fifth grades, allowing us to collect data across a three-year span. With the assistance of teachers, university researchers, and engineers, students engaged in project-based learning (e.g., building a bridge or rubber band powered car; designing packaging for candies). Throughout the club, children were positioned by the adults as engineers who engaged in planning, designing, testing, and problem-solving.

A major focus of social interaction in this afterschool space was Productive Communication (Shanahan, McVee, Silvestri, & Haq, 2016). Whereas many school-based discourse interactions foreground linguistic modes (e.g., listening to a teacher, reading a text, writing down notes, answering a question), Productive Communication attends to all modalities that may be part of a learning space. For example, in Engineering Club, students not only spoke to one another, but they also engaged in positioning through artifact use and manipulation. Students frequently positioned one another by maintaining control of key building materials such as tape or by keeping their body and hands close to a project so they were carefully positioned as the leader of a project. These other means of interaction were recognized by adults who not only

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engaged with children through speech, but adults also frequently relied upon other modalities (e.g., sketching, artifact manipulation).

The project that led to this conceptual and analytic paper was carried out by authors McVee and Shanahan who were co-investigators on an engineering and literacy project, and three graduate students, two of whom (Haq and Silvestri) helped collect the engineering data. Barrett joined the team later due to her interests in PT and multimodality.

### THE POSITIONING THEORY DIAMOND

Slocum-Bradley's approach to analysis using the PT diamond draws extensively from foundational work in PT and the positioning triangle (e.g., Hollway, 1984; Davies & Harré, 1990; Harré & Moghaddam, 2003; Harré & Slocum, 2003; Harré & Van Langenhove, 1991, 1999; Moghaddam, Harré & Lee, 2008; Van Langenhove & Harré, 1993, 1994, 1999). Adaptations of the PT triangle (van Langenhove & Harré, 1993) have often focused on minor changes to the triad. Slocum-Bradley (2009) proposed a more significant reworking of the original triangle shifting to a figure that includes rights and duties, identities, social forces, and storylines, drawing on more nuanced tenets of PT. (See Figure 1). These additions, she argues,

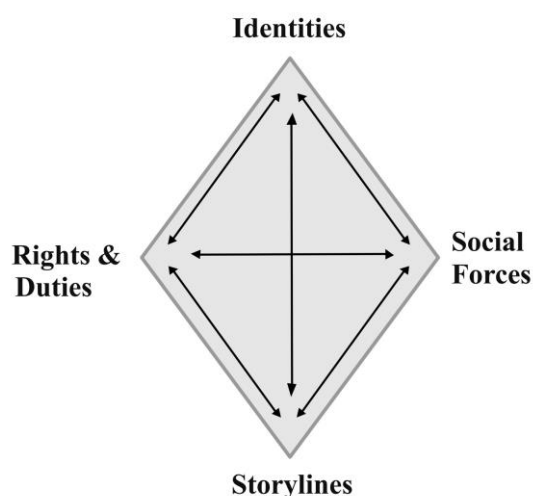


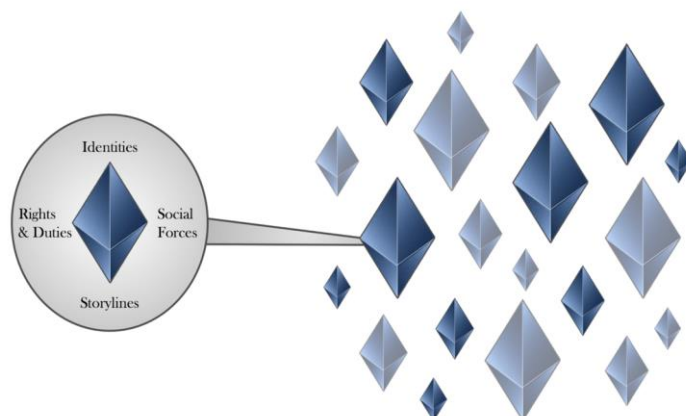
Figure 1. The Positioning Diamond (Slocum-Bradley, 2009, p. 92).

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provide a trans-disciplinary conceptual framework to “permit *systematic* analysis” (2009, p. 80, emphasis in the original) of discourse. Slocum-Bradley’s PT diamond provides researchers with multiple advantages over the initially developed PT triangle. It retains a visible marker for social forces, helping researchers be mindful of “moral fields” (Van Langenhove, 2017, p. 7) that can shape rights and duties, positions, identities, and storylines. The PT diamond, as an analytical framework, “enable[s] a more refined analysis of meaning-making and more acute explanations of the unfolding of social episodes” (Slocum-Bradley, 2009, p. 91), rather than glossing over the particularities between rights, duties, and identities. By highlighting the dynamic process of identity construction within the overlapping synergy between positioning and narrative, Slocum-Bradley shows how “the structures and functions of discursive exchange are related” (Harré, 1993, p. 116) when exploring ongoing socially constructed narratives.

Although Slocum-Bradley acknowledges the many facets that may be revealed through the positioning diamond, her model lacks representation across time and space. This limitation is problematic because “The distinction between past, present, and future does not go over neatly into psychological time, partly because the social and psychological past is not fixed. The social future can influence the social past” (Van Langenhove & Harré, 1999, p. 15). Positions may be adopted in the present based on an individual's remembered past or their perception of the future. While time often appears to be linear, when analyzing episodes of positioning that include narrative, we want to emphasize that discourse is often recursive as narrators flash ahead and flash back as a positioning episode unfolds and is narrated in the current moment (McVee, 2005). In order to highlight this dynamic, we have adapted Slocum-Bradley’s positioning diamond to include dimensions of non-linear time and space (Figure 2). This draws upon locations as arrays of people/identities rather than time/space (Slocum-Bradley, 2008, p. 111).

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*Figure 2.* Positioning Diamond in an Array of Relationships Across Time. (McVee, Silvestri, Barrett, & Haq, 2019).

Slocum-Bradley described the switch from the metaphor of triangle to that of a diamond as intentional. This attempt to evoke the multifaceted nature of an actual diamond gemstone is meant to convey to researchers that there may be other facets to discover even as they begin analysis. Building upon this metaphor, our model reflects the totality of the moral field; the impact of both space and time across multiple contexts of interaction, both public and private (Harré, 1983; Van Langenhove, 2017). Navigating and activating specific moral fields determines the ways that individual storylines are constructed as a part of everyday interaction. As Van Langenhove (2017) notes, “Moral fields are the invisible space in which persons live their lives” (p. 8).

Analysis utilizing the PT diamond relies on a three-tiered strategy inspired by Bamberg’s approach to narrative analysis and small stories (e.g., 1997, 2004a, 2004b, 2006). Slocum-Bradley (2009) attempts to disentangle “position” from “identity” (pp. 89-91), and demonstrate how identities can be evoked at all three levels of analysis. One of the most powerful aspects of PT as an analytic tool is that “not only persons and their identities both individual and social, but also societal issues on a cultural level can be tackled with the same conceptual apparatus” (Harré & Van Langenhove, 1999, pp. 11-12). Present tensions related to identity surrounding immigration, race, culture, and language use are concerns, and often catalysts for disruption, contention, debate, and even violence.

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PT provides a mode of analysis used to examine local moral orders or moral fields and how rights, duties, and storylines are constructed and represented. It also allows analysts to explore how individuals take up, examine, question, contest, and interrogate these moral orders at the local, institutional, and/or societal level. In this way, researchers can consider how acts, including speech, shape stories and position persons both socially and individually. In research as well as representation, analysts thus have the opportunity to examine many storylines and avoid falling into the danger of identifying or reifying only a single story (Adichie, 2009).

### **PROCEDURES FOR APPLYING THE POSITIONING THEORY DIAMOND AS ANALYTIC TOOL**

Our goal in applying the PT diamond was to see what types of insights could be uncovered through its application. In this exercise, we did not follow specific research questions but approached PT as a framework that allows scholars to examine “the way people do things and the meanings ascribed to what they do” (Harré & Moghaddam, 2003, p. 3). We were also guided by interests in identity and how examination of positions, storylines, rights and duties might provide insights into the moment-by-moment identities being constructed and enacted by the student engineers. Below, we describe specific steps we used to apply the PT diamond to data. We were also hopeful that revisiting of the Slocum-Bradley positioning diamond, which incorporates elements of Bamberg’s three levels of PT, would allow us to expand on its practical application and explore illustrations that may better account for the multimodal elements of positioning.

#### **Data Reduction**

Smagorinsky (2008) argues that one of the most under-articulated aspects of analysis is data reduction. Because the potential data corpus for this project was vast—comprising three years of data that included annotated transcripts, videos, photos, and field notes of student interactions in large and small group settings—data reduction was essential. Initial data reduction occurred by reading across case studies that had been constructed of children in the Engineering Club. After reading, Dimitri, one of the engineering club members who participated across all three years, was selected as a focus for analysis because of his consistent attendance, enthusiasm, and high level of social interaction. We also chose Dimitri because preliminary analysis showed that he

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“actively and agentively” (Bamberg, 2004b, p. 136) positioned himself in talk and action as an engineer. (For an analysis in this context of a learner who was not as extroverted, see McVee, Silvestri, Shanahan, & English, 2017).

Further data reduction occurred by focusing on data from a small group project related to construction of a bridge. Although design specifications changed, this project was used across all three years. Students built a bridge from popsicle sticks, tape, wooden skewers, toothpicks, and other materials. Bridges were tested to see how much weight they could hold, and participants were encouraged to make use of aesthetic and structurally sound design elements (e.g., triangles). Because the bridge data spanned three days (roughly approximately eight hours total across the three years), data were further reduced by choosing key episodes during the building process. To be selected, the episodes needed to include speech and other modalities of social interaction, and Dimitri needed to be a participant. One episode was selected from each year. Episodes were bounded by small group construction timeframes embedded in the club design that occurred during the final 20-30 minutes of each session. Within these construction timeframes, episodes of sustained discourse and modal density were identified and chosen for further scrutiny. We began our analysis by examining annotated transcripts which included speech but also analytic notes regarding other actions (e.g., material usage, body proxemics, gaze, and so on.). Field notes, video, and photos were consulted as needed.

### **Applying the PT Diamond for Analysis**

As noted above (Figure 1), Slocum-Bradley drew upon earlier positioning analysis to develop the positioning diamond. Within her analytic framework, Slocum-Bradley combined her approach drawn from Harré and others Positioning Theory with Bamberg’s three tiers of positioning analysis (e.g., Bamberg, 2004a, 2004b; Korobov & Bamberg, 2004, 2007). She summarized her combined analytic framework in a table (see Table 1).

Table 1

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### *Positioning Diamond Analytical Grid*

Positioning Diamond Elements	Levels of Analysis		
	Level 1 (Content)	Level 2 (Narrator-Interlocutor)	Level 3 (Ideological)
Social Forces of Discursive Acts			
Storylines			
Identities			
Rights and Duties			

This table does account for Bamberg’s and Harré’s approaches, but there were three reasons we felt that it was essential to focus separately on Bamberg’s well-articulated approach to analysis instead of relying upon the combined table alone as analytic tool. First, in illustrating the PT diamond Slocum-Bradley (2009) chose various examples to explain and illustrate the process of using her framework. While her process afforded examples for illustration of various components, it did not provide a mapping of the entire analytic process in detail. Second, we wished to consider what Bamberg’s three tiers provide on their own as compared to the PT diamond integrated model. Finally, and most importantly, Slocum-Bradley’s analysis largely takes place at a macro level. To illustrate her process, she drew extensively on examples such as European identity (Slocum-Bradley, 2010), referendums on policy decisions such as the adoption of the Euro (Slocum-Bradley & Van Langenhove, 2006), and US-Mexico border crossings (Slocum-Bradley, 2008). While effectively illustrating her analytic process at this level, her examples pose a challenge for social scientists working to uncover moment-by-moment interactions within face-to-face communications such as small groups or classroom discourse. Because Bamberg’s process was developed to examine such interactions and what he refers to as “small stories” (Bamberg, 2006; Bamberg, & Georgakopoulou, 2008), we wanted a clearer picture of what was afforded by Bamberg’s method alone and by the combined method (i.e., Table 2).

Analysis of the data proceeded using researcher-developed charts designed to help researchers implement PT analysis using both the Slocum-Bradley triangle and the Bamberg



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levels of positioning. Two members of the research team analyzed annotated transcripts using only the Bamberg framework while the other two analysts used Slocum-Bradley’s combined approach (i.e., Table 2). Each set of analysts engaged in collaborative coding, resulting in detailed conversations about how to operationalize analysis following what the authors (Bamberg and Slocum-Bradley) had written about and illustrated. Once agreement about analytic procedures was established, conversations ensued about how the analytic framework should be applied. As each pair of analysts proceeded, they completed a chart together for each social episode analyzed. This yielded one chart for Bamberg’s approach and another chart based on Slocum-Bradley’s PT diamond. These two tables were then merged. Table 2 is a completed, merged chart for analysis for an Engineering Club discussion of the bridge project that occurred on January 19, 2017 between Dimitri, Hudson, and an adult teacher/researcher, Katie.

Table 2

*Application of Slocum-Bradley’s PT Diamond Combined with Bamberg’s Three-Tiered Model of Positioning Analysis*

<b>Transcript Identification: January 19, 2017</b>				
<b>Positioning Diamond Elements:</b>	<b>Level 1 (Content) (foregrounds Dimitri)</b>	<b>Level 2 (Narrator-Interlocutor) (foregrounds interlocutors)</b>	<b>Transcript Excerpts &amp; Multimodal Actions</b>	<b>Level 3 (Ideological)</b>
<b>Social Forces of Discursive Acts</b>	Explaining: Dimitri’s intent is to explain the way the bridge operates	Explaining & Co-explaining with Hudson as teammates	“for our bridge, we  we tried to make something like, it would be...”	Dimitri’s intent within the larger Discourse is to prove his success as a bridge engineer
<b>THINK:</b> what is the illocutionary force (intent	NOTE: Non-specific	The project is not just his, it is theirs. There is dual	“And then we would pull it	

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of the speaker) of this speech act and/or action? This act/action can have more than one social force at each level.	references to materials make it difficult to determine Dimitri’s relationship to the materials themselves. Other modes of data may shed light on this. It is necessary to analyze actions as well.	ownership over both the project and the explanation. This can be seen through the consistent use of the words “we” and “our.”	up.” (Overlapping dialogue)
<b>Storylines</b>  <b>THINK:</b> What is going on in this speech act/ action? What is the possible goal or purpose of the actions or events?	Successful bridge building  Although the turns of talk are dominated by Dimitri, the actions and specific dialogue allude to the fact that the boys are a team.	Successful teamwork to build a bridge  Dimitri and his partner were trying to make a bridge. They create the storyline by demonstrating how the bridge was created. They positioned themselves as teammates and builders.	“So, for our bridge, we  we tried to make something like, it would be  not a drawbridge.”  <b>ACTIONS:</b> both boys work together to put the drawbridge piece back onto the bridge; both have hands on the artifact (i.e., bridge)

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<b>Identities</b>	student engineer, compliant,	teammate, successful	ACTIONS: both boys work	Dimitri and Hudson are
<b>THINK:</b> about who the actor is	engaged student	engineers, innovators	together to put the drawbridge	successful engineers within
(noun) and the characteristics		The telling of the story relies on the physical presence	the bridge scaffold; both	the elementary engineering club
attributed to him/ her (adjectives),		of the materials and the interaction between Dimitri,	have hands on the artifact (i.e., bridge)	Discourse of engineering and literacy: Rather than simply <i>tell</i> the
<b>NOTE:</b> characteristics attributed to		his teammate, and the materials.		story, Dimitri explains through
the actor(s) are often derived from				both discourse and action, thus complicating
the ways rights and duties are fulfilled				traditional definitions of literacy. Without taking into
				consideration the objects and processes of
				building the drawbridge, the story would not
				make sense.
<b>Rights and Duties</b>	Dimitri: has the duty to explain,	Katie (adult): has the right & duty to	“So, why don’t you tell me	The storytelling is a direct result of

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<p><b>THINK:</b> what local social norms are at play and how do the participants embody them?</p>	<p>to demonstrate, command a teammate.  He has the right to conform to expected student behaviors when prompted by a respected adult.  In the context of afterschool club, this is a right rather than a duty because he is not in traditional position of a student.</p>	<p>compliment, ask questions to invoke explanations.  Hudson (teammate): has the duty to explain and to demonstrate (Hudson later takes over, i.e., he has the right to ‘be charge’ and can reposition himself in the storyline)</p>	<p>about your bridge?”</p>	<p>the prompting from an adult that both boys are familiar with in the space of engineering club.  Dimitri and Hudson have a duty to perform as student engineers Katie has the right &amp; duty to compliment, ask questions to invoke explanations  Discourse of Children: Dimitri responds when prompted by an adult speaking to the Discourse of children, specifically children in a school setting.</p>
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This merging process allowed the research team to use the diamond to trace small stories and small episodes within a larger ideological level to map out multiple identities that surfaced. For instance, Dimitri, our focal participant, is seen across time positioning himself within a storyline Papers on Social Representations, 28 (1), 7.1-7.23 (2019) [<http://psr.iscte-iul.pt/index.php/PSR/index>]

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as both a leader and a teammate of the bridge making project. Even within this single episode, these identities are in evidence as the boys share the story of their bridge project. In this example, the two positions of leader and teammate can be determined through discourse as analyzed in the chart above which attends to speech and other acts, a first level of analysis. But the analysis can also be combined with observed body proxemics and gesture and positioning of the artifact as seen in Figures 3 and 4.



*Figure 3.* Dimitri uses his body to lead.



*Figure 4.* Teammates discuss the project.

### **Analysis Foregrounding Additional Data Sources and Modalities of Social Interaction**

In Figure 4, readers will see that Dimitri holds the bridge apparatus as he tells the story of its construction, but at other times while working on their project, he and Hudson share space equitably side-by-side (Figure 3). Layering on analysis of other semiotic modes such as body proxemics, gaze, and gesture, allows analysts to gather additional insights into meaning making that are not afforded through the initial textual analysis of the annotated transcripts or by speech alone. This layer of analysis can be added into Slocum-Bradley's PT diamond and analytic framework (Table 1), but will require broadening analysis to include photos and video that more readily convey how participants engage in embodied interactions across time and space. Alternatively, some researchers may wish to develop multimodal transcripts or use software that enable concurrent analysis of video, photos, and transcribed speech.

While space does not permit replication of all three tables used in analysis, a brief description of another example is useful, particularly in highlighting the storyline that Dimitri

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enacted over time as well as the positions that he and his group members took up. One of the advantages of the adaption of the PT diamond (see Figure 1) is that individual diamonds depict social episodes throughout time. These diamonds are all connected and do not necessarily progress along linear space-time continuum. For example, as Hudson and Dimitri engaged in the episode above, they were engaging in moment-by-moment positions, but these were also potentially influenced by previous episodes of social interactions and previous iterations of bridge projects which encompass other social relationships, moral fields, lived histories, and identities.

An example of Dimitri's previous experience with bridge building and positioning can be seen in the annotated transcript dated February 11, 2016, the second consecutive year of the Elementary Engineering project. This transcript was analyzed using the same collaborative process described above. The discussion featured in the transcripts occurred the day after bridge testing, shown below in Figure 5. Note that this photo can itself be analyzed for positioning. Within this storyline of bridge testing, each participant holds particularly rights and duties, identities. Social forces may be represented primarily through multimodal actions. In the photo, Aiden, on the left, is adding a weight to the bridge. Fatima, is responding to a question from researcher, Kate, who is just off camera; Fatima's fingers grasp a weight she was about to add to the bridge. Off to the right, Dimitri gazes at the bridge testing in progress. In front of him is the paper where he records team notes and the final weight. This information was used to make design changes at the next Engineering Club meeting. This storyline is important to Dimitri's emerging identity as an engineer. At the same time that Dimitri takes up this position, we observed that his position could be limiting to others in the group. For example, for a thorough analysis, we would also want to consider Fatima's interactions across time within various arrays. The examination of her storylines would also be crucial because female students more often perceive of themselves as "not good" at science or math—a mindset that often leads women and girls to avoid going into fields such as engineering (Dweck, 2008). While further analysis of Fatima's position is needed, it is encouraging to see that she was highly active in her engineering group with Aiden and Dimitri through both speech and other forms of multimodal communication.

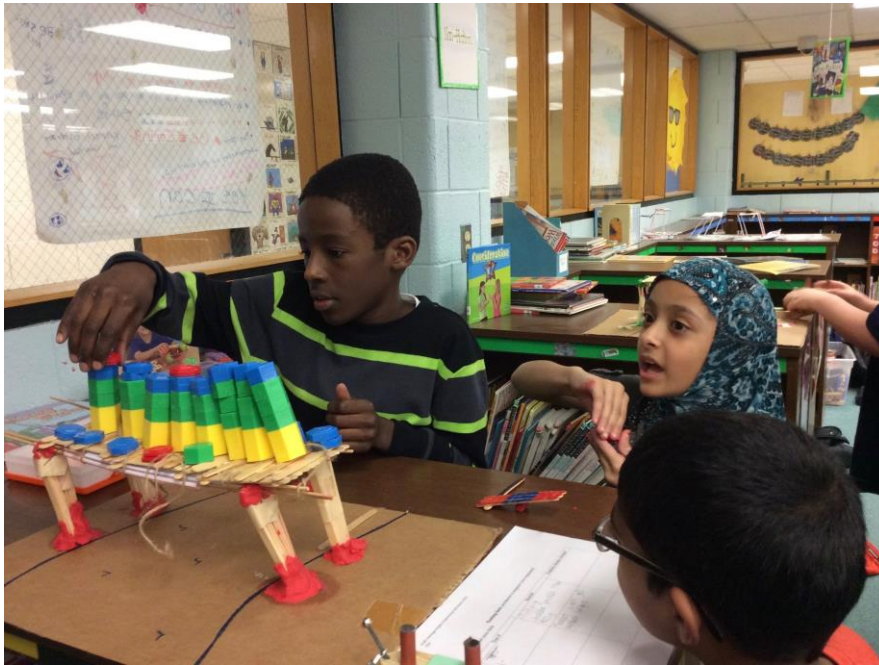
We also analyzed group interaction on the day of club that followed this testing. When prompted by an adult to tell the story of their bridge construction, Dimitri again positioned himself as an enthusiastic teammate as well as a leader in the engineering team. His response to

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the question included group decision making, evidenced in his pronoun use. At the same time, as a leader, Dimitri answered and then permitted Fatima to take up the storyline. He said, “This is our suggestion. If we could’ve used more modeling clay, we could’ve made two stands right here”. Dimitri gestured to the middle section of the bridge, then gestured to Fatima in a “go ahead” manner with a wave of his hand, and Fatima then took up the narrative. Throughout this episode, Dimitri positioned himself as the storyteller, shaping how the discussion and the story unfolded. The story shifted from narration of a past experience to a narrative of future potential as Dimitri repositioned the narrative by introducing a discussion of ideas for redesign, a key iterative step in the Engineering Design Process (EDP). Dimitri and his teammates first summarized what happened through oral retelling and gesture, then Dimitri created an expectation through action and dialogue that certain aspects of the design could be changed to improve its function. As they reflected on the testing, Dimitri’s teammates, Aiden and Fatima chimed in and added more specific details, naming materials, as they explored additional solutions around redesign of the bridge. While the storyline that emerged around building was a highly collaborative one, further analysis should explore how, if at all, Dimitri’s positions supported or constrained the opportunities to learn from his teammates Aiden and Fatima.

This example shows how researchers’ ability to reflect on the temporal aspects of the unfolding larger storyline can add to analysis of positions taken up or resisted within the smaller stories embedded within. Video and photographic data allow researchers to build in such temporal and spatial elements in ways that speech-based transcripts alone cannot.

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*Figure 5.* Dimitri records notes on paper. Aiden and Fatima add weights to the bridge. Fatima answers a question.

### REFLECTING BACK ON THE PROCESS OF ANALYSIS

In order to help clarify the use of PT in the exploration of specific methodologies available to researchers, we applied Slocum-Bradley's PT diamond and Bamberg's three levels of PT to data from our elementary school engineering and literacy project. We attempted to map Slocum-Bradley's and Bamberg's conceptualizations onto this engineering storyline to determine the feasibility of each approach, positioning over time, and potential extensions or clarifications to the models. We also were cognizant of the need to include and account for acts other than speech, thereby augmenting analysis.

To study identity positioning through social interactions at a micro level, it is important to layer units of meaning (modes), to study interactions in their entirety (Kress, 2010). The use of photos and video also supported aspects of the initial combined analysis of the other three facets of Slocum-Bradley's PT diamond, including Dimitri's rights and responsibilities, the engineering club storyline, and the social forces of the discursive acts examined among Dimitri, Fatima, and Aiden. Although the data shared here highlight two episodes within a large data set, we were able to examine Dimitri's positionings across a three year span, observing his gestures, the use of



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his body, manipulation of materials, and speech acts around bridge construction. Using Slocum-Bradley's analytic framework, we were able to tease apart Dimitri's positionings and identities as engineer, competent student, friend, leader, and teammate. This information can be added to the existing case study of Dimitri and further analysis could foreground Aiden and Fatima to investigate additional storylines and identities.

The application of the diamond to small group interactions proved to be more complex than expected when compared to Slocum-Bradley's (2006, 2008, 2010) examples, many of which dealt with straightforward macro examples and not complex learning events involving more micro level analysis of speech, other acts, and materials. By examining the results of analysis based on Slocum-Bradley and Bamberg, we were able to dig deeper into the annotated transcripts, resulting in a more robust analysis. Combining these analyses into one chart was helpful in presenting a clear picture of overall social interaction. These charts may help distill the essence of both Bamberg's and Slocum-Bradley's theoretical frameworks and methodologies by including specific questions researchers can ask themselves to guide analysis. The concrete examples supplied here can be used as tools with empirical data at the small group and classroom levels and can help navigate the complexities of positionings within educational settings. Triangulation through video data, artifacts, and still photos is highly recommended so that position construction can be examined through *other acts*, across time and space, complementing and supporting the discursive practices used.

## **FUTURE DIRECTIONS AND ADVICE FOR RESEARCHERS**

In this article we have attempted to peel back some of the layers of analysis that are required in operationalizing Slocum-Bradley's PT diamond and analytic model. Due to space constraints in research articles and chapters, these analytic procedures are often masked or highly abbreviated. For researchers wishing to use this approach, we offer the following suggestions.

First, become familiar with Slocum Bradley's own applications of the diamond (e.g., Slocum-Bradley, 2008, 2009, 2010). Because Slocum Bradley's analytic framework is meant to include Bamberg's process, we also suggest reading and becoming familiar with Bamberg's three-tiered model of analysis (e.g., Bamberg, 1997, 2004a, 2004b; Korobov & Bamberg, 2004, 2007). Based on our own experience, fine-grained semiotic analysis will be enriched when researchers understand and carry out the three-tiered model of analysis before attempting to

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combine it with the diamond. This may be particularly useful for analysts who have not analyzed data using Bamberg's approach with previous data. Additionally, to include specific attention to modalities beyond speech, researchers can draw from analytic work already developed by social semioticians (e.g., Jewitt, 2009; Hodge, Hodge & Kress, 1988; McVee & Carse, 2016). Readers who are unfamiliar with multimodality should be aware that scholars are rapidly developing new approaches around multimodal transcription that allows for representation of speech and other modes (e.g., Curwood & Gibbons, 2010; Ehret & Hollett, 2014; Smith, 2016; Wargo, 2015). Because all authors of this current article were well-versed in multimodal methods of analysis, we did not create an additional step for this process. However, it may be useful for those who are unfamiliar with multimodal analyses to undertake this step separately. Scholars unfamiliar with multimodal analysis should be aware that a great deal of multimodal analysis has been carried out and published, particularly in educational research. Rather than re-inventing methodological analyses and procedures, scholars would do well to identify existing research and procedures in multimodal analysis.

In this paper, we have demonstrated how the PT diamond and analytic framework developed by Slocum-Bradley can be applied to micro analysis of speech and other modes. We have relied upon Slocum-Bradley's representation of the PT diamond but also her framework that combines the diamond with Bamberg's positioning analysis. While we feel that this combination provides a complex level of detail, it is also possible that analysis could be carried out using the PT diamond itself and examining: rights and duties, identities, social forces, and storylines without the additional microanalysis that Bamberg's approach brings. This is also an area that scholars could explore in future analysis.

Finally, we challenge positioning theorists and researchers to develop further analytic examples and research studies that truly attend to and analyze all modalities. If positioning scholars continue to assert that PT applies to speech *and* other acts, theorists and researchers must begin to seriously take up a focus on language and social interaction that extends beyond linguistic modalities and toward examination of *all* semiotic modes.

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### References

- Adichie, C. N. ( July 2009). The danger of a single story. Retrieved from [http://www.ted.com/talks/chimamanda\\_adichie\\_the\\_danger\\_of\\_a\\_single\\_story](http://www.ted.com/talks/chimamanda_adichie_the_danger_of_a_single_story).
- Bamberg, M. G. (1997). Positioning between structure and performance. *Journal of narrative and life history*, 7,(1-4), 335-342.
- Bamberg, M. (2004a). Form and functions of ‘slut bashing’ in male identity constructions in 15-year-olds. *Human development*, 47(6), 331-353.
- Bamberg, M. (2004b). Positionings with Davie Hogan: Stories, tellings, and identities. In C. Daiute & C. Lightfoot (Eds.), *Narrative analysis: Studying the development of individuals in society* (pp. 135-157). Thousand Oaks, CA: Sage.
- Bamberg, M. (2006). Stories: Big or small: Why do we care? *Narrative Inquiry*, 16(1), 139-147.
- Bamberg, M., & Georgakopoulou, A. (2008). Small stories as a new perspective in narrative and identity analysis. *Text & Talk-An Interdisciplinary Journal of Language, Discourse Communication Studies*, 28(3), 377-396.
- Curwood, J. S., & Gibbons, D. (2009). “Just like I have felt”: Multimodal counternarratives in youth-produced digital media. *International Journal of Learning and Media*, 1(4), 59-77.
- Davies, B., & Harré, R. (1990). Positioning the Discursive Production of Selves. *Journal for the Theory of Social Behaviour*, 20, (1), 43–63.
- Dweck, C. S. (2008). *Mindsets and math/science achievement*. New York, NY: Carnegie Corporation of New York, Institute for Advanced Study, Commission on Mathematics and Science Education.
- Ehret, C., & Hollett, T. (2014). Embodied composition in real virtualities: Adolescents' literacy practices and felt experiences moving with digital, mobile devices in school. *Research in the Teaching of English*, 48(4), 428-452.
- Harré, R. (1983). *Personal being: A theory for individual psychology*. Oxford: Blackwell.
- Papers on Social Representations, 28 (1), 7.1-7.23 (2019) [<http://psr.iscte-iul.pt/index.php/PSR/index>]

## POSITIONING DIAMOND AND MULTIMODAL SOCIAL INTERACTION

- Harré, R. (1993). *Social being* (2nd ed.). Oxford: Blackwell.
- Harré, R., & Moghaddam, F. M. (2003). Introduction: The self and others in traditional psychology and in positioning theory. In R. Harré & F. M. Moghaddam (Eds.), *The self and others*. (pp. 1-11). Westport, CT: Praeger.
- Harré, R., & Slocum, N. (2003). Disputes as complex social events: On the uses of positioning theory. In R. Harré and F. Moghaddam (Eds.), *The Self and others* (pp. 123–136). Westport, CT: Praeger.
- Harré, R., & Van Langenhove, L. (1991). Varieties of positioning. *Journal for the Theory of Social Behaviour*, 21, 393–407.
- Harré, R., & Van Langenhove, L. (1999). The dynamics of social episodes. In R. Harré & L. Van Langenhove (Eds.), *Positioning theory* (pp. 1-13). Oxford: Blackwell.
- Hodge, R. & Kress, G. (1988). *Social semiotics*. Ithaca, NY: Cornell University Press.
- Hollway, W. (1984). Gender difference and the production of subjectivity. In J. Henriques, W. Hollway, C. Urwin, C. Venn, & V. Walkerdine (Eds.), *Changing the subject* (pp. 223-261). New York: Routledge.
- Jewitt, C. (Ed.) (2009 ). *The Routledge handbook of multimodal analysis*. London: Routledge.
- Korobov, N., & Bamberg, M. (2004). Positioning a ‘mature’ self in interactive practices: How adolescent males negotiate ‘physical attraction’ in group talk. *British Journal of Developmental Psychology*, 22, 4, 471-492.
- Korobov, N., & Bamberg, M. (2007). Strip poker! They don’t show nothing! Positioning identities in adolescent male talk about a television game show. In M. Bamberg, A. De Fina, & D. Schiffrin (Eds.), *Selves and identities in narrative and discourse* (pp. 253-271). Amsterdam: John Benjamins.
- Kress, G. (2010). *Multimodality A social semiotic approach to contemporary communication*. New York: Routledge.
- McVee, M. B. (2005). Revisiting the black Jesus: Re-emplotting a narrative through multiple retellings. *Narrative Inquiry*, 15(1), 161-195.
- McVee, M. B., & Carse, C. (2016). A multimodal analysis of storyline in the “Chinese Professor”: Narrative construction and positioning in economic hard times. *Visual Communication*, 15(4), 403-427.

## POSITIONING DIAMOND AND MULTIMODAL SOCIAL INTERACTION

- McVee, M. B., Silvestri, K. N., Barrett, N., & Haq, K. S. (2019). Positioning Theory. In D. E. Alvermann, N. J. Unrau, M. Sailors, & R. Ruddell (Eds.), *Theoretical models and processes of literacy* (7th ed., pp. 381-400). New York: Routledge.
- McVee, M. B., Silvestri, K., Shanahan, L.E., & English, K. (2017). Productive Communication in an Engineering afterschool club with girls who are English Language Learners. *Theory Into Practice*, 56(4), 246-254.
- Moghaddam, F., Harré, R., & Lee, N. (Eds.). (2008). *Global conflict resolution through positioning*. New York: Springer.
- Shanahan, L. E., McVee, M. B, Silvestri, K. N., and Haq, K. S. (2016). Disciplinary literacies in an engineering club: Exploring literacy and the engineering design process. *Literacy Research: Theory, Method, and Practice*, 65(1), 404-420.
- Slocum-Bradley, N. (2008). The positioning diamond: Conceptualizing identity constructions at the US-Mexico border. In N. Slocum-Bradley (Ed.), *Promoting conflict or peace through identity* (pp. 103-138). Farnham, UK: Ashgate Publishing.
- Slocum-Bradley, N. (2009). The positioning diamond: A trans-disciplinary framework for discourse analysis. *Journal for the Theory of Social Behaviour*, 40(1), 79-107.
- Slocum-Bradley, N. R. (2010). Identity construction in Europe: a discursive approach. *Identity: An International Journal of Theory and Research*, 10(1), 50-68.
- Slocum-Bradley, N., & Van Langenhove, L. (2006). *Legitimation and expressions of identity and attitude: A discursive approach*. United Nations University, Occasional Papers. Retrieved from <http://cris.unu.edu/sites/cris.unu.edu/files/O-2006-12.pdf>
- Smagorinsky, P. (2008). The method section as conceptual epicenter in constructing social science reports. *Written Communication*, 25 (3), 389-411.
- Smith, B. E. (2016): Composing across modes: a comparative analysis of adolescents' multimodal composing processes. *Learning, Media and Technology*, 1-20.
- Van Langenove, L. (2017). Varieties of moral orders and the dual structure of society: A perspective from positioning theory. *Frontiers in Sociology*, 2(9), np. doi:10.3389/fsoc.2017.00009
- Van Langenhove, L., & Harré, R. (1993). Positioning and autobiography: Telling your life. In N. Coupland & J. F. Nussbaum (Eds.), *Discourse and lifespan identity* (pp. 81-99). London: Sage.
- Papers on Social Representations, 28 (1), 7.1-7.23 (2019) [<http://psr.iscte-iul.pt/index.php/PSR/index>]

## POSITIONING DIAMOND AND MULTIMODAL SOCIAL INTERACTION

Van Langenhove, L., & Harré, R. (1994). Cultural Stereotypes and positioning theory. *Journal for the Theory of Social Behaviour*, 24, (4), 359–372.

Van Langenhove, L., & Harré, R. (1999). Introducing positioning theory. In R. Harré & L. Van Langenhove (Eds.), *Positioning Theory* (pp. 14–31). Oxford: Wiley-Blackwell.

Wargo, J. M. (2015). Spatial stories with nomadic narrators: Affect, snapchat, and feeling embodiment in youth mobile composing. *Journal of Language and Literacy Education*, 11(1), 47-64

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