Language, Gestures & Space
in the Classroom of ‘Dead Poets Society’

Victor Lim Fei
Multimodal Analysis Lab
(Interactive Digital Media Institute, National University of Singapore, victorlimfei@nus.edu.sg)

Abstract

Teaching and learning in the classroom is a multimodal experience. The teacher uses a range of modalities such as language, gestures and classroom space to construct a classroom experience for the student. This paper investigates the multimodal orchestration of these three modalities in the classroom of the film, Dead Poets Society. A detailed micro-analysis of the modalities is achieved by applying Systemic Functional Multimodal Discourse Analysis (SF-MDA) and using the interface of the Multimodal Annotation and Analysis Tool developed in the Multimodal Analysis Lab, National University of Singapore. As the study of gestures in Systemic Functional Theory is still at a developmental stage, this paper also proposes an approach to annotating gestures and mapping the meanings made. This paper explores the applications of SF-MDA to classroom research and considers how Systemic Functional Theory can offer a viable perspective to understand the co-deployment of the various modalities in pedagogic semiosis.

1 Introduction

Traditionally, the focus on interactions in the classroom has been primarily on the modality of language, that is, how language is used by the teacher and students and how that determines and shapes the unfolding of the lesson. Recent inroads made in the field of multimodality is drawing attention to the repertoire of modalities, such as language, images, symbolism, music, gestures, and space, where very often, two or more of these modalities are co-deployed in meaning making and are orchestrated in all human experience (see for example, Baldry 2001, Jewitt, 2009, Jewitt & Kress, 2003, Kress & van Leeuwen, 2001, O’Halloran, 2004/2006, Royce & Bowcher, 2006, Ventola & Guijjaro, 2009).

While the pioneering work thus far has mostly focused on the description of the range of modalities used in the classroom as well as the study of functional affordances (and constraints) of these resources in pedagogic semiosis, there have been fewer studies centreing on a detailed analysis of the specific meanings made by each modality and how they operate combinationally in the construction of a lesson and the presentation of the classroom experience for the student.

This study contributes to the developing field of multimodal literacy by applying multimodal lens to the classroom. Drawing from the very rich field of Systemic Functional (SF) Theory (Halliday, 1978; 1985/1994/2004), this paper adopts the Systemic Functional Multimodal Discourse Analysis (SF-MDA) approach (O’Halloran, 2004, O’Halloran & Smith, submitted for publication) to investigate a teacher’s use of meaning making resources in the classroom. This paper also is also a pilot study into pedagogic discourse using the analytical software, Multimodal Annotation and Analysis Tool, under
development at the Multimodal Analysis Lab. The functional affordances of the Multimodal Annotation and Analysis Tool allow for not only a synoptic perspective on the multimodal text, but also offer a dynamic perspective on the multimodal text. In other words, the instantiation of text at a particular point in time, as well as the logogenesis of the text in its dynamic unfolding can be investigated using the Multimodal Annotation and Analysis Tool. For further discussions on the use of interactive digital media in SF-MDA as well as the advantage of engaging in trans-disciplinary collaboration between social scientists and computer scientists to map meanings, see O’Halloran, 2008 and Podlasov et al (2009).

2 Modeling Gestures

As an exploratory study in the use of gestures in the classroom, I have chosen to apply a ‘bottoms-up’ perspective that is analogous to developing the phonetics of language rather than its phonology. This paper develops a basic description of movements, which allows for the annotations of the various moves made by the teacher. Based on this, a discussion of the nature of the gestures and their contributions to meaning making will be made. In demonstrating the productivity of a detailed delicate analysis of teacher’s use of modalities, every move made by the teacher (enactor) will be annotated. The micro-analysis of every move is also applied in the hope of revealing interesting meanings, which a more macro-analysis might miss.

This paper adopts a descriptivist perspective on gestures that is founded on SF Theory. Gestures are seen as semiotic resources with meaning potential that are instantiated and realised through syntagmatic and paradigmatic selections offered by systems on various strata. Like language, gestures can be viewed from the perspective of possessing both an expression and a content plane. Martinec’s (2000, 2004) work on actions contributes to the understanding of how various processes and systemic choices are realised in types of actions.

Following his lead, this paper proposes that the expression plane of gesture, involves the material form, enacted through the physical body. The content plane, arguably, can be seen to possess a grammatical stratum, organised along the musculoskeletal physiology which determines what movements, and thereby meanings, can or cannot be realised. The semantics stratum is concerned with the meanings made through the purposeful actions and practical actions. Meanings made, as Hood (2007) proposed, are metafunctionally oriented as well. Analogous to the ranks of word, group, phrases and clauses in language, gestures are organised according to the ranks as well along the principle of constituency, take for instance, the ranks of the finger, hand, arm and upper body. This paper also argues that an Action is made up of one or more Movements. For example, the Movements of bringing palms repeatedly with certain force produce the Action of clapping. The detailed descriptions of the annotations for gestures used in this paper can be found in the Appendix.

While the focus of the analysis is on the annotation and analysis of movements and how they make up actions, it is important to note that other systems are also in operation on the level of Actions, such as repetition, speed and force, as well as how they combinationally produce rhythm, gradation and tempo, even though they are beyond the immediate scope of discussion in this paper.
3 Analysis

The film Dead Poets Society was directed by Peter Weir and released in 1989. Dead Poets Society won the Academy Award for Writing Original Screenplay, and inspired the book of the same name. Weir received a nomination for Best Director and the film itself was nominated for Best Picture of 1989. Robin Williams (who acted as Mr Keating) also received a Best Actor nomination.¹

The main protagonist, Mr Keating is a passionate English teacher at an elite boys’ school. A central theme in the movie is Mr Keating encouraging students to explore and discover the joys of poetry for themselves as opposed to just acquiring the knowledge of poetry espoused and determined by scholarly works. The one minute clip used for analysis in this paper focuses on the first lesson that Mr Keating has with the students and where the focus of his lesson was to get his students to appreciate the value of learning poetry.

The Multimodal Annotation and Analysis Tool is used as the interface for analysis in this paper. The tool allowed for the SF grammar analysis of the language used by Mr Keating along with a transcription and annotation of the gestures used as well as the description of the varying use of classroom space at specific time in the lesson. Figure 1 is an example of the SF-MDA on the film clip.

Figure 1. Snapshot of Film Analysis using the Multimodal Annotation and Analysis Tool

No matter what anybody tells you, **words and ideas can change the world.** I see that look in Mr. Pitt’s eye, like nineteenth century literature has nothing to do with going to business school or medical school. Right? Maybe. Mr. Hopkins, you may agree with him, thinking "Yes, we should simply study our Mr. Pritchard and learn our rhyme and meter and go quietly about the business of achieving other ambitions." I have a little secret for ya. Huddle up. Huddle up! We don’t read and write poetry because it’s cute. **We read and write poetry because we are members of the human race. And the human race is filled with passion.** Medicine, law, business, engineering, these are all noble pursuits, and necessary to sustain life. **But poetry, beauty, romance, love, these are what we stay alive for.**

**Figure 2. Linguistic Text from Extract**

The language from the extract was transcribed and the clauses representing the arguments for the learning of poetry are highlighted in Figure 2. From the transitivity analysis of the language, it is significant to note the different ideational meanings attributed to arguments for the learning of poetry and the arguments against the learning of poetry. The dominant process associated with the arguments against learning poetry is the mental process whereas the dominant process associated with the arguments for learning poetry is the relational process. See Figure 3 for examples. This is significant as it suggests that there is a shift from knowledge, as instantiated by the mental processes, to experience, as instantiated by the relational processes. This shift in epistemology from knowledge to experience is both privileged and championed in the film. This choice to use relational processes adds to Mr. Keating’s exhortation on the value of learning poetry.

<table>
<thead>
<tr>
<th>Arguments Against Poetry</th>
<th>Arguments For Poetry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mental Processes</strong></td>
<td><strong>Relational Processes</strong></td>
</tr>
<tr>
<td>• I see that look in Mr. Pitt’s eye</td>
<td>• I have a little secret for ya.</td>
</tr>
<tr>
<td>• Mr. Hopkins, you may agree with him,</td>
<td>• because we are members of the human race.</td>
</tr>
<tr>
<td>• thinking &quot;Yes, we should simply study our Mr. Pritchard</td>
<td>• And the human race is filled with passion.</td>
</tr>
<tr>
<td>• and learn our rhyme and meter</td>
<td>• But poetry, beauty, romance, love, these are what we stay alive for.</td>
</tr>
<tr>
<td>• We don’t read</td>
<td></td>
</tr>
<tr>
<td>• and write poetry</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 3. Transitivity Analysis**
Nonetheless, the focus on language alone is inadequate and insufficient to demonstrate the sophisticated orchestration of modalities used to communicate Mr Keating’s lesson focus. An analysis of the gestures, particularly in its contextualising relations with language, made in the text uncovers interesting observations as well. Significantly, the dominant hand gesture associated with the arguments for learning poetry is that of pointing with the index finger and with the fist, as seen in Figure 4 & 5. The sense of emphasis evoked by this pointing gesture co-contextualises with the linguistic arguments for poetry to reinforce his message. In contrast, the dominant hand gesture associated with arguments against the learning of poetry, interestingly, is that of pointing with the pinky, as seen in Figure 6. This is a dismissive gesture suggestive of derision. In addition, the gesture of hands clasped together or both palms down (absence of pointing), suggesting restraint, is also associated with the linguistic arguments against the learning of poetry, as seen in Figure 7. These gestures, re-contextualises the linguistic text to accentuate the sense of irony and sarcasm.

Figure 4. Pointing with Index Finger
Figure 5. Pointing with Fist
Figure 6. Pointing with the Pinky
Figure 7. Restraint Gestures

Through the annotation of the lower body movements of Mr Keating in the classroom, it is also possible to observe meaningful use of the classroom space and its relationship with the linguistic arguments he makes. Mr Keating presents his argument at the front of the classroom and moves forward to assert his point. Significantly, he moves backwards when he gave an ironic concession to his point. This coupled with the gestures, re-contextualises the linguistic text and bring out the sarcasm in mock arguments he raised against the learning of poetry. Finally, in a highly marked position, Mr Keating squats in the middle of the classroom, with his students huddled around him, as he delivers his main, the emphasis of the lesson. Figure 8 summarises the use of space in Mr Keating’s presentation of his argument for the learning of poetry.
The analysis of the modalities of language, gestures and space in this short lesson extract is revealing of how the teacher effectively co-deployed the various meaning making resources at his disposal to bring out the central message of his lesson. The orchestration of the multimodal ensemble, in this case, is done effectively to explicate the message of the importance of poetry the students. Nonetheless, it must also be noted that the classroom and teacher represented is one that is depicted in a film, and hence, a somewhat idealised version. It is likely that the scene analysed in this paper has been directed, staged and crafted so that every meaning making resource, in addition to language, is deployed to bring out the best effect. It would therefore be interesting to compare the analysis of the orchestration of modalities in this classroom to that of an actual classroom in reality.

### 4 Conclusion

This paper applies the SF-MDA to analyse the teacher’s use of modalities such as language, gestures and space in a classroom scene from Dead Poets Society. A detailed micro-analysis of the language and gestures was done with the points of interest highlighted for discussion in this paper. The merits of a careful micro-analysis are demonstrated through the observations made of the film in this paper, notwithstanding the considerable effort and time that such a delicate analysis would require. While the results from the analysis suggest that the teacher in the film has used the three modalities effectively and meaningfully, particularly in their interplay and co-deployment, it is acknowledged that only a very short segment of the film was investigated in this study. Even as this paper proposes an approach to model and annotate gestures in the classroom,
applying it to the analysis of the film text, the productivity of this approach remains to be tested by further research. At this moment, it remains, at best, a preliminary endeavour to map the meanings made through gestures and to consider its relationship with the other modalities.

Acknowledgement
This work was supported by the Singapore National Research Foundation Interactive Digital Media R&D Program, under research Grant NRF2007IDM-IDM002-066

References


## Appendix - Annotations for Gestures

### ARMS

#### Movement

<table>
<thead>
<tr>
<th>HAND</th>
<th>(Palm Direction /Up/ Down/Back/Side/ Front) &amp; (Pointing Fist/Thumb &amp;/ Index &amp;/ Middle &amp;/ Ring &amp;/ Pinky)</th>
<th>L/&amp;R H, PDi: Up/D/B/S/Fr/ , Po: Fis/T &amp;/l &amp;/M &amp;/R &amp;/P</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOWER ARM</td>
<td>(Level Head/ Torso/ Thigh, Movement Front/Left/ Side/Right/ Back)</td>
<td>L/&amp;R LA, Lv: H/To/Th, My: Fr/L/R/B/S</td>
</tr>
<tr>
<td>UPPER ARM</td>
<td>(Movement Front/ Side/ Back/Left/Right)</td>
<td>L/&amp;R UA, My: Fr/S/B/L/R</td>
</tr>
<tr>
<td>Action</td>
<td>(Left-Right/ Front-Back/ Up-Down/ Oscillate)</td>
<td>Act: L-R/ Fr-B/ Up-D/Os</td>
</tr>
</tbody>
</table>

### HEAD

#### Movement

| Tilt: Up/ Down/ Left/ Right |
| Face: Front/ Left/ Right |
| H, Ti: Up/D/L/R |
| H, Fa: Fr/L/R |

| Actions | Swivel/ Shake/ Nod |
| H, Act: Sw, Sh, Nod |

### TORSO

#### Movement

| (Direction: Left/ Right/ Front, Angle: Straighten/Bend) |
| To, Di: L/R/Fr, Ag: St/Bd |

### LEGS

#### Movement

| (Angle: Straight: Stand / Bend: Kneel, L &/R / Squat, Sit) (Step: Front/ Left/ Right/ Back) (Foot Direction: Front/ Left/ Right) |
| L &/ R Leg, Ag: St/Bd: Kn L/&R / Sq / Sit, Step: Fr/L/R/B, FDi: Fr/L/R |

### GESTURAL CONJUNCTIVE RELATIONS

With own body

| [Single (touch, slap) / Repetitive (scratch, rub)] |
| L H - R H |
| L F.I - R LA |

With other object(s)/body

| L H – Tabletop |