

Article

Scaffolding Content in an Online Content and Language Integrated Learning (CLIL) Module

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Abstract

This paper describes how the content knowledge in an Academic English Writing, Content and Language Integrated Learning (CLIL) module 'Colour: Theory, meaning and practice' was adapted to online delivery to adjust to the COVID pandemic social distancing measures. The module is delivered to small groups of approximately 15 students, and, in face-to-face mode, the pedagogy exploits this by engaging students in small group discussions, dialogue, questioning, and oral presentations. In a face-to-face mode, the content is unpacked and scaffolded dialogically throughout the tutorials. Shifting to an online delivery in a well-equipped setting (technology was widely available to tutor and students) involved deliberate scaffolding of content and orchestration of the various technologies and the various interaction they afford in order to achieve the same learning outcomes. In doing this, the author found that the Legitimation Code Theory dimension of semantic gravity, which conceptualises content knowledge in terms of levels of abstraction, was helpful to guide the scaffolding of content over the tutorial. The paper describes the content and the aim of the module and one specific tutorial on Colour in Film leading to a written assignment. It then briefly explains how Legitimation Code Theory was used in this context. The tutorial stages are described to demonstrate how students were provided different types of activities to engage gradually with increasingly abstract and theoretical content.

Keywords

CLIL, online teaching, scaffolding, Legitimation Code Theory, colour semiotics

1 Teaching Context and the Challenges of Online Delivery for Student Engagement

The context of this paper is a Content and Language Integrated Learning (CLIL) module provided to first year students in multi-disciplinary groups in the National University of Singapore. The CLIL approach consists of using a specific academic field as a medium through which language skills such as English academic literacy and critical thinking are taught (Brooke, 2018). Students are expected to develop two

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knowledge bases: academic English skills, such as reading, synthesizing sources from the literature, engaging in academic discussions, and writing various English academic genres on the one hand, and in the case of this module, a knowledge of colour theory, meanings and practices. This module is provided by the Centre for English Language Communication and belongs to an academic writing programme called the Idea and Exposition Modules (IEM). The courses are compulsory language modules and follow the CLIL approach, focussing on English academic writing and a specific topic (the 'content' in CLIL). Modules offerings include: Interpreting the Vampire; The Politics of Food; Human Behaviours; Sports and Socialization; Science Fiction and the Empire; Meaning across cultures; Citizenship and Society, and several others. The module described in this article is called 'Colour: Theory, Meaning and Practice. It aims to guide students to analyse meanings of colour use in various artefacts (any designed work like adverts, films, buildings, political posters, packaging and products, and more) and various fields (arts, marketing, politics, communication, among others). First, students develop a core vocabulary to engage with the topic of colour through an overview of colour theory and then explore a social semiotics parametric lens to analyse colour meanings in context (van Leeuwen, 2011). The lens is briefly detailed below. Most of the students are Singaporeans and join the module with a fairly good command of the English language, although their academic writing may need some development to help them cope with their disciplinary studies. The language syllabus focusses on academic reading and writing. Students are assessed in three written assignments: a summary response, a lens paper (which is detailed below), and a final expository paper. For students of this level, CLIL is believed to be very appropriate as it engages students in cognitive challenges and authentic academic writing tasks (Marsh et. al, 2010). A major characteristic of the modules is the small class size, which rarely exceeds 15 students. This allows for a pedagogy which centres on rich interaction with tutor and peers. The face-to-face classroom is a scholarly environment where students voice and share their learning in a range of activities, and where abstract content is unpacked through dialogue and discussion (Brooke, 2018).

In March 2020, the COVID pandemic and governmental responses to it in the form of safe distancing measures or even stay home advice brought great and very sudden disruption to the teaching of this module. The delivery was shifted to 100% online from the midpoint of the semester in March, until the end in May. The institution is well equipped with various IT platforms such as Zoom, Microsoft Teams, and Google suite, which was fortunate. However, the issue of student engagement in the content was challenging. Student engagement describes a psychological investment and effort on the part of the student to learn, understand, and master the intended learning outcomes (Newman, Wehlage & Lamborn, 1992). Student engagement in an online environment is categorised into three types: learner to learner, learner to instructor, and learner to content (Martin & Bolliger, 2018) and has been argued as having crucial impact on issues such as learner isolation and retention (Banna, Lin, Stewart & Fialkowski, 2015) as well as meaningful learning (Moore, 1993). In their 'Distance education online environment interactivity/community-process model', Lear et al. (2010) detail the manifold factors related to students, course and instructor which contribute to developing class interactivity and their strategies include video conferencing, synchronous and asynchronous discussions, the use of various channels and platforms, strong instructor presence, video casting, and a range of social media platforms. For engagement with content, strategies listed in Martin & Bollinger (2018) include: watching videos, searching for information and activities which scaffold the engagement with the content. However, little is said about the way the content knowledge influences the choices of interaction, of technological platform, and of guiding activity. As I started to conceptualise my content for online teaching, I realised that the scaffolding which I operated in the face-to-face setting would have to be very systematically and deliberately planned as well as clearly communicated to students in the online environment. In this planning, thinking about content knowledge in terms of its relation to immediate context or its level of abstraction helped approach the task of building an online scaffold. In doing this, as I will detail below, semantic gravity, a concept from the Legitimation Code Theory (LCT) toolkit was extremely helpful. LCT is a sociological framework which provides a way to analyse knowledge practices in a range of settings

(Maton, 2014). There are five LCT dimensions: Specialization, Semantics, Autonomy, Temporality, and Density, which enable an analysis of the underlying organising principles of knowledge practices.

In the next section, Semantic Gravity will be explained briefly before an online tutorial is described and analysed for the way it engaged students progressively with the content, first raising degrees of theoretical content, then guiding students to apply the theoretical content to various contextualised artefacts.

2 A Framework to Link Content Knowledge to Interaction and Online Tools

Semantic gravity is defined by Maton (2013, p.56) as ‘The degree to which meaning relates to its context, whether that is social or symbolic. Semantic gravity may be relatively stronger (+) or weaker (–) along a continuum of strengths. The stronger the semantic gravity (SG+), the more closely meaning is related to its context; the weaker the gravity (SG–), the less dependent meaning is on its context’. For example, a theoretical term, such as Colour Semiotics is abstract and represents a weak level of semantic gravity; the term refers to a theory which is connected to dense and abstract meaning. An example in the stronger semantic gravity realm could be a concrete image of a film poster with its specific, contextualised use of colour. In the middle, we might find some generalised patterns of colour use. This will be developed further in the tutorial description.

Semantic gravity can be analysed in a range of educational settings such as, a classroom dialogue, a lesson plan, or a text. The different strengths of semantic gravity can then be charted as a semantic wave profile (as shown in Figure 1), which helps visualize the way these meanings are organised and interact in a given setting. In the Figure 1, the y axis indicates semantic gravity from weak at the top, to strong at the bottom. The x axis may indicate time (as in this article), but might be indicative of an unfolding text, depending on the object of the analysis. Semantic waves can help, for example, educators to chart the type of knowledge claims they present to students and try to avoid staying along a flatline as shown in Figure 1 where a low flatline (A) indicates content that is consistently tied to the context, while a high flatline (B) indicates content which is abstract.

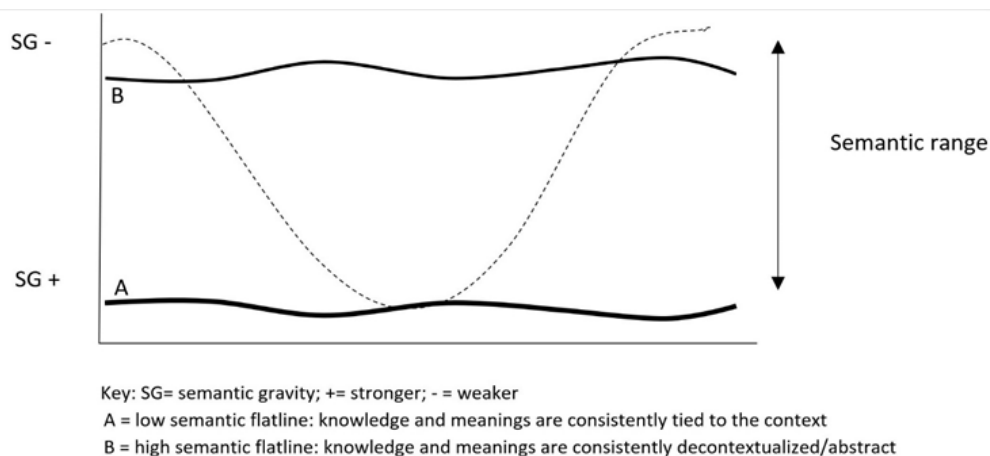


Figure 1. Illustrative semantic profile and semantic ranges (adapted from Maton, 2013, p.13)

The concepts of semantic gravity and semantic waves are crucial to knowledge building as many studies have demonstrated (see for example, Martin & Maton, 2013; Maton, 2013; Matruggio, Maton, & Martin, 2013). Content knowledge represented in the high flatline B can fail to engage students meaningfully or to support their understanding of the theoretical content of the tutorial. On the contrary, when content is solely presented as concrete examples, or closely related to the students’ contexts, as shown in the low flatline A in Figure 1, students may find it difficult to attain a sufficiently analytical level of engagement. This is likely to serve them badly in assignments which require them to display their analytical skills and understanding of theoretical concepts. LCT-based research into this has

shown that it is the variation of semantic gravity throughout a tutorial (and over a whole module), or semantic waves between these knowledge types, indicated by the dotted line in Figure 1, which enables students' cumulative learning. When content follows a semantic wave, students are more likely to be able to unpack theoretical content, and relate it to more concrete contexts, and to then re-connect a given concrete example to the theory. The concept of semantic gravity is applied below to a tutorial content scaffolding to show the reader how this concept can help plan an online tutorial.

3 A Sample Online Tutorial

This section presents the activities of a single 1 hour 40-minute tutorial including the pre-tutorial preparation, and the post tutorial follow up activities.

3.1 Planning the online tutorial

The process was divided into pre-tutorial, during-tutorial, and post-tutorial activities, as shown in Figure 2. The pre-tutorial tasks were key to complete so the tutorial activities would unfold as expected synchronously. The tutorial activities are described in the next section. The tutorial was followed by a series of asynchronous activities.

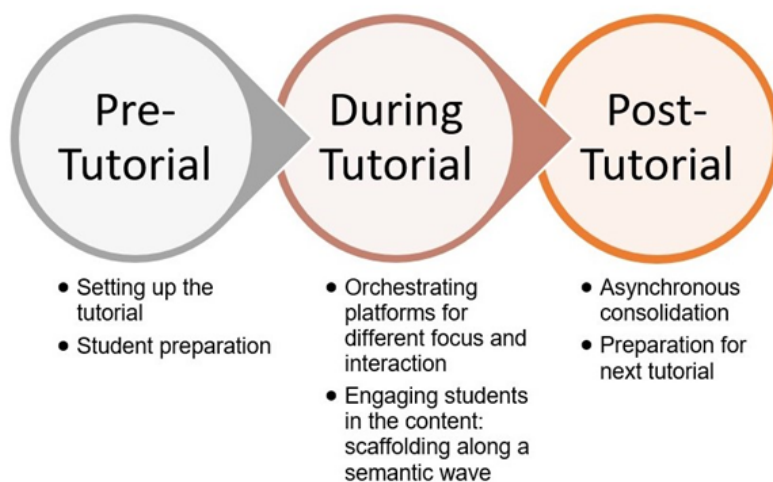


Figure 2. Focus in pre, during, and post tutorial

As part of pre-tutorial preparation, the tutor set the platforms and the activities which unfolded in the synchronous online mode. I planned and made visible the plan of the lesson, and the different platforms. I prepared the class-shared Google Doc in advance with the tasks' guidelines, and the tables to be filled in by students. I sent an email with required material including the set reading, the slides, the zoom and the google doc links. Communication guidelines such as how to interact on the google doc, and in the Zoom chat, were shared, as well as the details that aid communication such as an assigned font colour for the tutor (the module is about the importance of colour in visual communication, after all). Students were given an academic article on colour in film to read and annotate for main points. They were asked to find a video clip to illustrate the techniques mentioned in the reading.

3.2 Tutorial activities

The tutorial occurred mid semester and aimed for students to explore the use of colour in film and the types of meanings that are constructed by colour. For example, colour may express an ideational meaning. This is the case when a specific colour indicates a theme in a film. Colour also conveys interpersonal meanings, with colour schemes conveying moods and atmospheres for the audience. Finally, colour also plays a textual function. For example, colour filters are used to indicate information about time, such as flashbacks (Kress & van Leeuwen, 2002). Students prepare to deploy an analytical lens on a given artefact related to film (a screen shot, a movie poster, a whole scene, or a comparison of two or more scenes). The lens comes from van Leeuwen's work (2011) and consists in describing the colour use according to a series of distinct parameters such as hue, value, saturation, luminescence, lustre, luminosity, and modulation, all of which have meaning potentials in their specific contexts. For example, commercials tend to use high saturation and lustre to evoke luxury and indulgence, as in high end chocolate adverts.

Another key aim of the tutorial was to prepare the students for the second written assignment of the module, a lens paper. In this assignment, students were provided a choice of artefacts and were asked to write an 800-word analytical paper (see Appendix 1 for the assignment sheet). In order to do well in the paper, students had to manage the detailed description of the colour use in a given artefact and integrate the theoretical lens and the literature associated with the artefact. It was therefore especially important that this tutorial would equip them with the tools to undertake the written assignment. The challenge for me was to provide sufficient support, and to explain the lens and the analytical process in a way which would replicate what happens in a face-to-face tutorial. The table below summarises the activities and their aims, and the technology used for each stage. The activities are then further detailed.

Table 1

Overview of the Activity Sequence, Aims, Technological Tools and Interaction

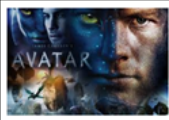



Overall aims of the tutorial		<ul style="list-style-type: none"> • Understand how colour functions in film • Understand the types of meanings colour makes in film • Practise using the lens to describe a film artefact • Start working on assignment 2, the lens paper
Activities	Aims	IT platform and interaction
Activity 1 (10 min)	Select a favourite film that used colour in a noticeable way <i>Activating existing knowledge</i>	Zoom Single, class-shared Google Doc Group work
Activity 2 (15 min)	Watch a video and take notes of the colour schemes and impact on the viewer <i>Bridging contextualised knowledge with abstract knowledge</i>	YouTube Single, class-shared Google Doc Group work
Activity 3 (10 min)	Attend a short lecture on colour in film <i>Accessing theoretical knowledge</i>	Zoom Whole class

Activity 4 (30 min)	Complete a guided reading of an academic paper <i>Unpacking theoretical knowledge</i>	Single, class-shared Google Doc Group work in Zoom Breakout Rooms
Activity 5 (10 min)	Discuss the reading <i>Unpacking theoretical knowledge, making connections</i>	Zoom Whole class
Activity 6 (20 min)	Analyse a film artefact: guided practice <i>Applying theoretical knowledge</i>	Zoom Whole class
Post-tutorial	Analyse a film artefact: individual work <i>Applying theoretical knowledge</i>	Asynchronous work on Google Doc

3.2.1 Activity 1: Select a favourite film that used colour in a noticeable way

Activity 1 aimed to activate existing knowledge. Students interacted in groups on Zoom and the class shared Google Doc.

The class met on the Zoom platform to go over the tutorial. Information was provided in the whole class shared google document (see Appendix 2 for the welcome page). The tutorial got underway with Activity one, a first group activity which required students to select a favourite film where colour played a significant role. Students were given a pre-drawn table to fill in on the Google Doc (see sample student work in Figure 3 below) where they pasted a screenshot of a favourite film and explained what they noticed about colour use.

Avatar (2012)		Transparency - shows integration and overlap of two worlds Hue - Cool tones, calm and soothing, not overpowering and brings out a space theme Luminosity - bright specks on protagonist's face suggest another dimension and an intergalactical world, showing mystery and new possibilities
Howl's Moving Castle	 	The use of colour to differentiate between the world Sophie understands (More differentiated hues with high saturation, cooler temperature) and the world Howl is living in where he is trying to defend against the attackers (Less differentiation, warmer temperature, use of darker hues)
The Grand Budapest Hotel (2014)		The light pink hue shows that it is a light hearted comedy but the facial expression depicts otherwise. Also, noting the stereotype colours on the different gender.

Group 3

Film	Screen shot	Colour use

Laetitia Monb... 12:27 PM Feb 17
yes, and also the traditional teal/orange type of complementary scheme for blockbusters

Laetitia Monb... 12:19 PM Feb 17
very nice example, so here the colour codes the geographic location and the rules and mood in the different places

Laetitia Monb... 12:28 PM Feb 17
Great example, Wes Anderson is really one of these master colorists! Like Wong Kar Wai or Baz Luhrman

Figure 3. Sample of student contributions in Activity 1

In semantic gravity terms, the knowledge activated here was contextualised to the student's own experience, their favourite films, and what they may have noticed about colour meaning and function in film. Therefore, this stage of the lesson is charted as exhibiting strong semantic gravity (strong connection to immediate context) (see Figure 4). The purpose of starting a tutorial with strong semantic gravity is so that theoretical concepts can build on what students already know. As students go through the remaining activities, they are presented with more theoretical ways to analyse the colour usage they have noticed.



Figure 4. Semantic gravity profile of the online tutorial

3.2.2. Activity 2: Watch a video and take notes of the colour schemes and impact on the viewer

The activity aimed to bridge contextualised knowledge with abstract knowledge, it involved group work and used YouTube and the single class-shared Google Doc for IT platforms.

Activity 2 consisted of watching a video sourced on YouTube, titled '10 best uses of colour in film', and of completing a pre-drawn table on the class Google document. This activity scaffolded a gradual increase of the abstractness of content exploiting non-academic discourse. Compared with the knowledge activated in activity 1, the knowledge presented in this video consist of a systematic way to look at colour in film by listing different colour schemes in famous films, and the impact on the viewer these schemes may have. However, the knowledge range in this activity was still non-theoretical. The video contributor, CineFix is described as a platform for 'cinema buffs.' The description was limited to colour schemes and only broad impacts on the viewer were indicated. For example, the selective sepia palette of the Cohen brothers' film 'O Brother, Where Art Thou' was described as evoking a dusty vintage look. The context of the film was not considered in depth, and the content was mostly descriptive, rather than analytical. The register was not academic.

This second activity, however, helped students to progressively connect their existing knowledge (activated in activity 1) with a more systematic approach to colour analysis. In terms of semantic gravity, the content here was bridging up towards more generalisation. This weakening in semantic gravity is shown in Figure 5.

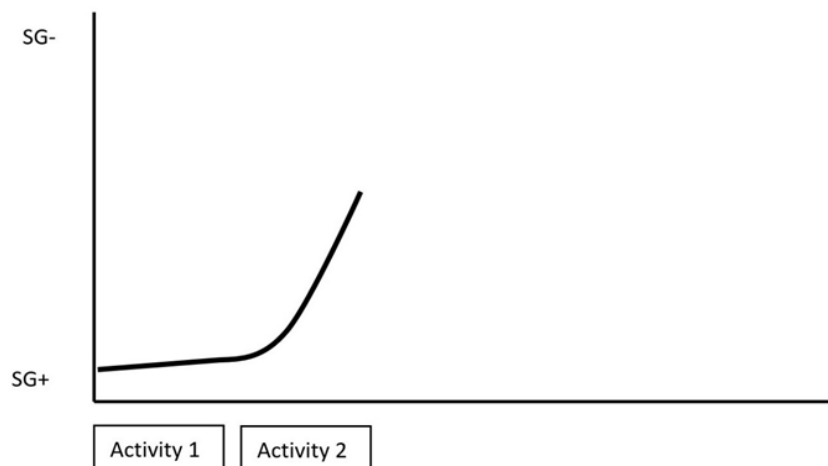


Figure 5. Semantic gravity profile of the online lesson

3.2.3. Activity 3: Attend a short lecture on colour in film

Activity 3 aimed to explain theoretical knowledge of colour in film. For this type of knowledge, the tutor interacted with the whole class on Zoom in lecture mode.

The tutor revisited and deepened the knowledge about the theoretical framework used in the module, namely, van Leeuwen's (2011) parametric analytical framework for colour meaning. The lens, briefly described at the beginning of this section, is a metafunctional colour semiotics approach which categorises colour meanings into metafunctions. As explained above, colours make ideational meanings (they represent entities), make interpersonal meanings (they evoke feelings), and make textual meaning (they organise a space or a time sequence). With this theoretical approach, students can start exploring colour use in various artefacts, and drawing conclusions on the way colour functions in our visual world to communicate meanings. In this tutorial, the theoretical framework was illustrated with an example taken from film, but throughout the semester, other fields and artefacts are also explored, for example marketing artefacts, designed products, public spaces, artistic productions and many other items. This ensures that for each part of the module, the same theory can be recontextualised. In terms of semantic gravity, Activity 3 was the highest point on the semantic wave, as it constitutes the most abstract knowledge and the most transferrable knowledge presented in this tutorial (see Figure 6).

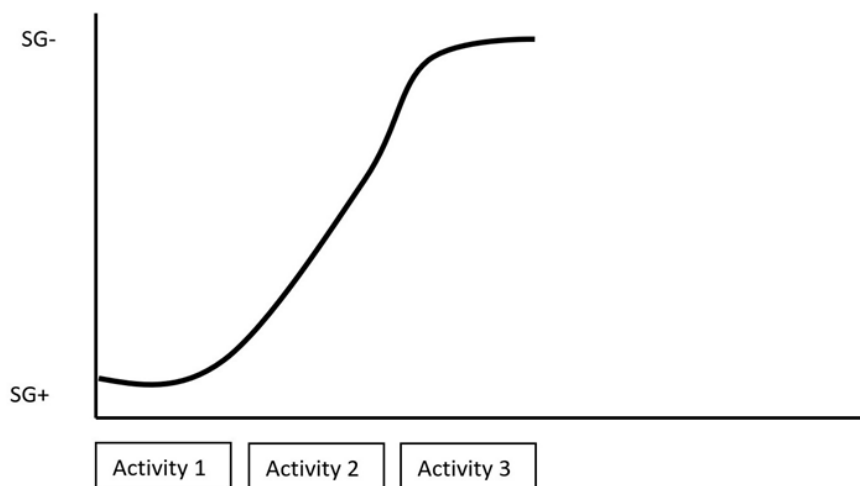


Figure 6. Semantic gravity profile of the online lesson

3.2.4 Activity 4: Complete a guided reading of an academic paper

Activity 4 aimed to unpack, explain and illustrate theoretical knowledge. Students were grouped in Breakout Rooms to discuss a list of questions related to the following set reading: Chaudhuri, S. (2016). Color Design in the Cinema of Wong Kar-wai. In M. Nochimson (Ed.), *A companion to Wong Kar-Wai* (pp. 153–181). Chichester, UK: Wiley Blackwell. The text provided both a detailed literature review on colour in film, and a precise case study of a Hong Kong film director, Wong Kar Wai's masterful colour techniques.

The questions were provided in the shared Google Doc, so students could type their answers following a group discussion in a Zoom Breakout Room. The tutor provided guidance in the Breakout Rooms, and written feedback in the Google Doc. The tutor also asked further probing questions and elicited concepts in the Google Doc. This ensured that all responses and feedback were visible to the whole class and accessible during the rest of the semester. A screen shot of the students' work and the interaction with the tutor is shown in Figure 7.

The screenshot shows a Google Doc on the left and a Zoom chat window on the right. The Google Doc text includes:

"Smudge motion" - colours segue and blur into each other. Achieved by decreasing shutter speed and speed and step printing. In a sense, this technique is kinda used to express the inexpressible. The intense feelings of love, mixed with passion and many other feelings that words simply cannot express. This smudge technique can be seen As Tears go by when the main characters have their first kiss - delivering dreamy romantic visuals.

"To seize the indefinite; to fix what is unstable; to give form and location to sights so evanescent and complex that they could hardly be named" (Hughes 1991, 124)."

Q7: What are the other ways Wong Kar Wai use colour in his films.

Coloured audition - an exquisite fusion of music and colour. An attempt to translate music into colour. For instance, in this scene of *In the Mood for love* (<https://youtu.be/ynY9OakCfRU>), this scene is entirely driven by the music and visuals without any dialogue between the actors. [honestly i have not watched the movie so i'm not too sure of the plot] The scene is largely dark since it was shot in the alley, with limited lighting which occasionally highlights the protagonists. This creates a focus on the

silhouette of the lady wearing the cheongsam, while the accompanying cello/strings which complements her slow alluring walk down the alley since to create a deeper undertone of sensuality and loneliness. The music seems to reach a crescendo when the scene focuses on each of the protagonists - suggesting some deep longing/desire and yearning screaming inside of them? Finally when they both meet by the alley, the music ceases, which is into an expectation subversion (since you would typically think that the music might go all crazy as the spark flies between the two.) However, I guess the break in the music seems to suggest how both characters have broken out of their own reverie and thoughts and brought back reality and they meet each other (signals a change in tone at the point of the film?)

1.22: As some of you have finished Activity 3, I'll upload the ilo ilo sample paper in the LuminUS Handout workbin :-)

Come back here (at the end of today's session below) to say goodbye at around 13:35 and to ask questions!

Group 4

Q1: Why is Wong Kar Wai's technique compared with painterly techniques?

The texture of his films seems as if he is painting a picture, made more realistic with the use of brush strokes

Q 2: What does 'colour as a form of montage' mean?

When contextualised with other colours, a certain colour takes on more than one meaning.

The Zoom chat window shows the following messages:

Yes, very good

Laetitia Monbec... 12:53 PM Feb 17

Laetitia Monbec... 12:53 PM Feb 17

how does this technique play with the notion of time?

[Redacted] 1:00 PM Feb 17

I feel that the technique seems to convey the sense of time being stretched out for the lovers, perhaps an

Laetitia Monbec 1:06 PM Feb 17

yes! Excellent! And in a violent scene, like in *Fallen Angels*, or in the chase scenes in *Chungking Express*, the fast

Laetitia Monbec... 1:11 PM Feb 17

So nice!

Laetitia Monbec... 1:17 PM Feb 17

The whole film is like this :-) it is a beautifully poetic film with minimal action - really worth watching!

Laetitia Monbec... 1:20 PM Feb 17

Figure 7. Unpacking an academic paper with guiding questions

In terms of semantic gravity, students in this activity were still engaged with fairly abstract and theoretical content but the questions guided them to unpack these concepts, connect them to examples, and clarify them. The theory was unpacked through various exemplifications and explanations drawn from Wong Kar Wai's oeuvre. Knowledge claims were woven at different semantic gravity degrees, engaging students in abstract, general and more concrete and context-tied content. This interplay of semantic gravity is shown in Figure 8.

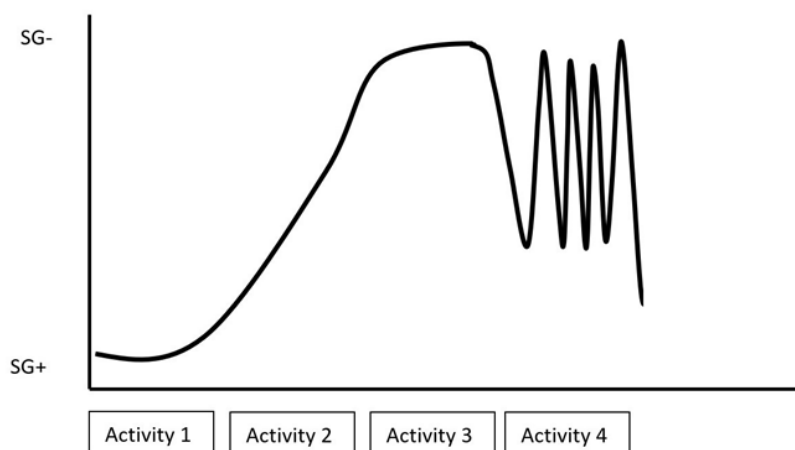


Figure 8. Semantic gravity profile of the online lesson

3.2.5 Activity 5: Discuss a set academic article

Activity 5 aimed to continue unpacking theoretical knowledge and to make connections with previous content in the tutorial. For this whole class discussion, Zoom was used. I shared the Google Doc where the four groups had recorded their answers and led a discussion to clarify any of the concepts, to answer questions, and to engage students further in the content by using probing questions.

This segment of the lesson provided the opportunity for students to share the video clips they had found that illustrated the colour techniques discussed in the paper, like ‘smudge motion’, for example. To connect the dots of the lesson at this stage, the tutor used the new concepts to refer to the students’ favourite films mentioned in Activity 1. At this stage, the students could go back to their initial contribution but were equipped to analyse it with theoretical tools seen in the tutorial. In terms of semantic gravity, this segment of the tutorial shows a wide range, from the theoretical concepts of metafunctions, for example, the general techniques exemplified in the reading, to the concrete examples provided by the students at the beginning of the class (see Figure 9).

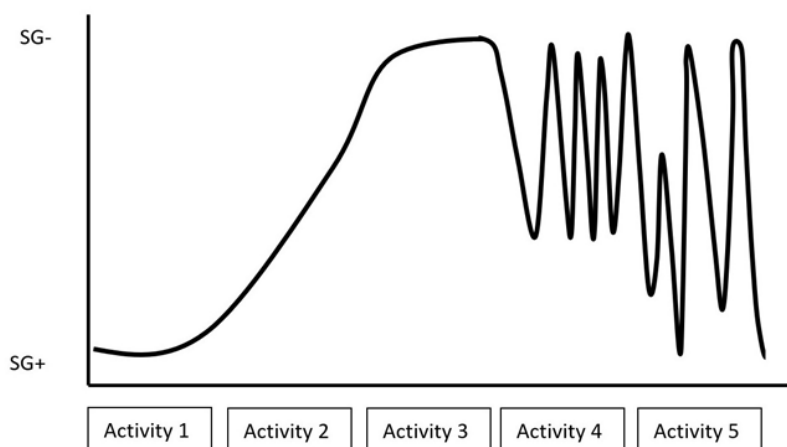


Figure 9. Semantic gravity profile of the online lesson

3.2.6. Activity 6: Analyse a film artefact through guided practice

Activity 6 aimed to model the steps of a film artefact colour analysis, applying theoretical knowledge to a concrete artefact. Zoom and the class Google doc were used with the tutor guiding a whole class discussion. This activity provided a model for the written analysis students would start for the lens paper assignment.

In Activity 1-5, students were equipped with theoretical and analytical tools to explore colour meanings in film artefacts. In activity 6, students were provided with the movie poster of the 2019 film *Parasite* by Bong Joon-Ho, as a concrete designed artefact to analyse. The tutor guided the analysis by demonstrating the steps and eliciting the description and the interpretation of the colour use. Much of the analysis and the interpretation were elicited from the students. The steps involved researching the context of the artefact, deploying the parametric lens, and referring to the literature on colour in film which was explored in the article on Wong Kar Wai.

This sixth activity brought the students back to a very concrete context, a given artefact. However, they were now able to deploy a theoretical lens to analyse the artefact thoroughly, in an informed manner, relating to other artefacts and to colour practices in film. In the case of the movie poster of *Parasite*, students could relate the colour use to the genre of the film, and to the themes discussed in the story, such as socio-economic status and social mobility. This means that, in semantic gravity terms, they were able to wave between the concrete and theoretical to apply and recontextualise the theory (Figure 10).

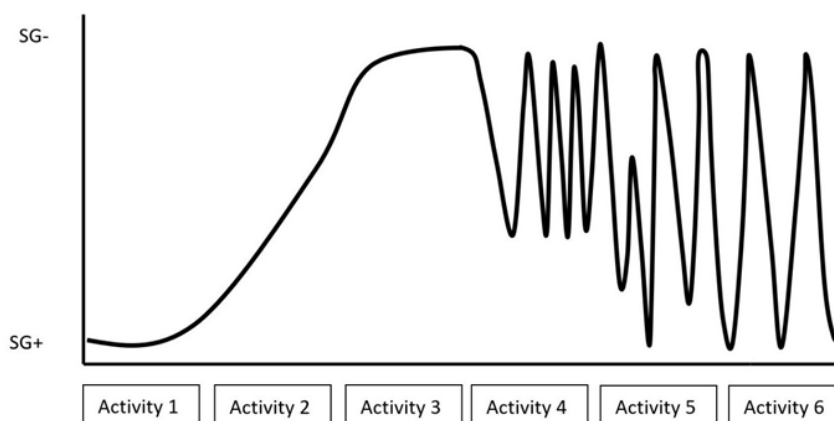


Figure 10. Semantic gravity profile of the online lesson

3.3 Post-tutorial: Asynchronous task

This activity continued asynchronously after the tutorial. Students were asked to prepare the analysis of a different artefact. In the following tutorial, students shared and discussed their analysis in small groups. They then completed a text deconstruction of a previous semester's student lens paper. In this activity, the approach followed the Teaching and Learning Cycle (Rothery, 1996) and its deconstruction, joint construction and independent construction. The independent construction consisted of the assignment writing task (see Macnaught & Yates, this volume, for more information on this pedagogical approach for synchronous writing instruction).

4 Outcome of the Tutorial

Despite the significant disruption, and the change to our class interaction, the online tutorial described in this paper achieved a positive outcome in terms of engagement of the students, and in their writing of the lens paper assignment.

First, a high level of engagement from the students was observed in the large number of comments, and active participation in the class, on all the platforms. This was due to the scaffolding which allowed students to engage with the content progressively from concrete to more theoretical, and to see how the two connect when a theoretical lens is deployed on a concrete artefact. In the online setting, the sequence of activities was conceptualised to exploit the affordances of the technology. The tutorial maximised the opportunity for discussion, peer- to-peer engagement and tutor-to-peer engagement, which alleviated the isolating sensation an online lecture can provide. My presence was constant throughout the various interactions, both orally in Breakout Rooms and whole-class discussions as well as in written form on the Google shared document. The activities were also relatively short and were communicated in advance, ensuring that students understood the outcome of the class.

Students' perceptions of the practices described here were positive. In an end of semester survey 47 respondents provided feedback on various aspect of the tutorials. They commented on the degree of effectiveness of the tutorial for their understanding of the content, and how the written mode and the use of Google Doc enabled them to consult the archived contributions at a later date (among other things):

I was surprised by how effective the online sessions were even though I very much prefer the physical classes. I felt that the activity where we analysed the different parametric of colour was extremely useful to have online and as a reference and I find myself referring back to it to refresh my memory as I was writing both paper 2 and paper 3.

The tutorial described here also had impact on the students writing of the lens paper assignment which they started shortly after this tutorial. As explained earlier, in this assignment, students were asked to write an 800-word analytical paper on a given artefact (Appendix 2 provides the task sheet and the choice of artefacts). I was concerned that without the face-to-face spontaneous communication, and the fact that the lens was taught online, the students might feel less comfortable with this assignment. For example, they might have found it difficult to integrate the theoretical analysis in their paper. This is why the tutorial shown here paid careful attention to scaffolding the theoretical content from the students' current knowledge and provided modelling of an artefact analysis.

Despite the sudden change in the semester, the students generally performed well on the paper. They were able to apply the steps, to deploy the lens, and to refer to the appropriate literature to write a convincing interpretation of what they saw in the artefact. In their papers, they were able to show a range of semantic gravity, from a concrete description of the colour use in the artefact to a more theoretical discussion of the role of colour in that type of artefacts.

The shift from face-to-face teaching of content to online teaching therefore did not present a detrimental effect on students' performance on the assignment. There are signs, as shown in the student's comment above, that the possibility to refer to the analysis done online, and recorded on the Google Doc in this tutorial, had positive impact for the students who needed additional guidance as they wrote their paper.

5 Reflection and Recommendations for CLIL Teachers

The COVID pandemic and distancing measures disrupted our ways of teaching and learning significantly. They did so in such an abrupt manner that it is surprising that so many educators and students were able

to be so reactive. In January 2020, I had no idea I would be using several IT platforms and re-tooling my module for online delivery within such short notice. My context is the National University of Singapore, a well-equipped university with institutional support and students who are technologically savvy and generally well outfitted with technological devices. A key to our success was that students and tutor bought into the measures which aimed to keep us all safe. Therefore, we all approached the challenge with goodwill. Students were very forgiving and supportive of any mishap while I saw the pastoral care adjacent to my teaching responsibilities grow significantly throughout the semester.

Challenges, however, remain. The initial transition has passed, but we now face a whole semester online (Semester 2, starting in August 2020). The way this affects students' engagement and learning will need to be carefully investigated and addressed. It has been obvious that teaching content online requires very deliberate planning to scaffold student learning over one tutorial and over the semester. Interactions which occur in the classroom and aim to unpack concepts and relate concepts to students' context can be done through dialogue and spontaneous questions. In the online setting, the interaction becomes more stilted, less natural. Educators need to actively orchestrate the platforms and the content so that the engagement with the content is scaffolded purposefully to compensate for this loss of spontaneity.

In CLIL, we need to address the teaching of both content and language. This article has focused on content and shown a way student engagement with content can be scaffolded, matching the appropriate IT platform, and the relevant interaction it affords with the type of knowledge involved. This has helped me to visualise the flow of the online tutorial and to map the activity sequences with each phase building on the last, ensuring students are engaged in varied activities and interactions to sustain the interest and focus.

While the content of the article is very much on the C of CLIL, the following list of recommendations may apply to the teaching of language too:

- o Think of the content knowledge being taught during the tutorial, notice what is abstract and theoretical, and what is more concrete.
- o Match knowledge type with interaction type and with appropriate technological platform. Abstract knowledge is likely to be unpacked by the tutor first in a whole -class lecture mode, but this can quickly be followed by group discussions with the tutor as a guide as students apply the abstract content to concrete contexts. Platforms like Google and Zoom Breakout Rooms afford good opportunities to discuss and to record outcome of discussion.
- o Allow engagement to build from one stage to the next.
- o Allow for a change of activity and platform so students do not experience fatigue (listening to a zoom lecture for long stretches of time can diminish attention)
- o Allow for the fact that students may become distracted: maximise opportunities for group work and discussion by implementing a range of activities such as those shown in this paper.
- o Make all lesson outcomes and stages visible and signposted.

In the semester to come, it will be crucial for educators to consult the literature thoroughly and share our practices as much as possible so that we can make informed decisions. Increased student input and feedback will also be critical in building new ways to teach and learn. These discussions are already happening, through this Special Issue, for example, and many professional conversations happening at the local or global level. Using theoretical underpinnings, such as Legitimation Code Theory, to analyse the new educational challenges, devise appropriate solutions and evaluate the impact of our teaching is also likely to help educators think about their practice in useful ways.

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Appendix 1.

Assignment 2 task sheet

Colour: Theory, meaning and practice

Assessment task Sheet

Paper 2: The Lens Paper

600-800 words (25%)

The lens: van Leeuwen, T. (2011) *The Language of colour. Chapter 5: A parametric theory of colour (pp56-68)*

You will be given a limited choice of primary visual sources (a painting/film grab, a space, an object, etc). Analyse the **one** item of your choice according to the concepts introduced in the van Leeuwen chapter, first observing and describing the salient parameters and their meaning potential, and then proposing an interpretation of their meaning **within this context of the piece**.

Remember to deploy the parameters that are relevant to the piece (not every single one). You should provide a brief rationale. Parameters should be used to *describe* the artefact and to *link with their meaning potential* (using van Leeuwen and additional literature). You also should have a stance that either confirms the meaning intended is achieved or argues that a parameter analysis reveals additional meanings which may not have been intended. While you should focus on colour, you may also refer to a wider visual analysis approach such as Kress & van Leeuwen's (1996, 2006) for example to refer to the position of the viewer or compositional elements (Refer to the online version of the book Reading Images: The grammar of visual design).

Use sources beyond van Leeuwen's lens. When you make a claim about the meaning a colour may contribute, you should source this in the literature (from the module and beyond). You can add pictures, and you should include a colour scheme generated by one of the software we have seen in class.

Structure:

Your introduction should provide a broad context of the artefact. It should then present a **stance** and your selection of **parameters**.

The body should contain a balance of rich and technical description of the colour use, the meaning intended and your interpretation (which may differ from the meaning intended or may align with it). You may have description first then interpretation, or each paragraph dealing with both.

Note on additional sources: you may find analysis of the artefacts below in the literature, and it is fine to read and to include them (cite them appropriately). However, you should apply the lens by yourself and interpret the meaning intended and achieved by yourself.

Choose ONE only of the following artefacts to develop your lens paper.

Artefact 1: Illustration by *Carly Strohmaier*



<https://www.mourningthecreationofracialcategoriesproject.org/>

Artefact 2: *Reputation*, album cover. Taylor Swift



Artefact 3: *The Garden of Words*, anime still by Makoto Shinkai, and photograph.



Artefact 4: *Parasite*, by Bong Joon Ho, movie poster [Practice artefact]



Artefact 5: *A Land Imagined*, by Yeo Siew Hua. Movie poster



Appendix 2.

Introduction on Google Docs

The groups for today:

- Group 1: Betty, Kyla, Matthiew, Gail
 Group 2: Josuah, Jasmine, Patricia, Roy
 Group 3: Kevin, Reena, Zena
 Group 4: Xena, Mark, Lionel and Lucette

The schedule for today

Activity 1: Discuss and share examples of your favourite films and what you noticed about colour use. (10 minutes, and while everyone arrives)

Activity 2: Exploring the types of functions colour plays in film. Watch a short video and fill in a table (20 minutes)

Activity 3: A few slides to go over the types of meanings colour makes in film from a social semiotic perspective (10 minutes)

Activity 4: The art of Wong Kar Wai: Skim through the paper and discuss main points in breakout groups, following the questions. (30 minutes)

Activity 5: Zoom for whole class discussion. (15 minutes)

Activity 6: Look at the poster for Parasite, and discuss the types of colour meanings (15 minutes)

Preparation for next tutorial: Read the sample paper 2 on the Ilo Ilo poster and go through the HO.

Materials to open:

The **slides** for Colour in Film (in the LumiNUS files folder)

The **Wong Kar Wai reading** (in the LumiNUS files > Readings folder)

The **sample paper** on ilo ilo (in the LumiNUS files>handouts)

Platforms for today: Zoom, this shared Google Doc, LumiNUS for Slides and other handouts; also check emails before and after class.

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