Transformative music invention: interpretive redesign through music dialogue in classroom practices

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Abstract

In this thematic case study in a rural primary school, young children of diverse socio-cultural origins use transformative and transmodal redesign in music as they explore new conceptual meanings through self-reflexive interaction in classroom music events. A focus on music dialogue created by interaction between modes is seen to promote inclusiveness and transformation of learning. This praxial approach to music learning in the classroom context uncovers hidden dogma used to justify existing structures in the curriculum. In music education in Australia there is still a common failure to acknowledge that embodied and situated music making found in "everyday life" (De Nora, 2011) is linked to conceptual knowledge of music. In this study, investigating young children's selections of semiotic resources when redesigning meaning in a dialogue of modes enables educators to determine how conceptual knowledge of music is established, extended and expanded through children's developing understanding of the elements of music during redesign. The complexity of young children's use of music imagery and genre and their grasp of music concepts is evident in their interactions in classroom music events. Awareness of the space of music dialogue allows for a deeper insight in children's capacity for music invention.

Key words: classroom music dialogue, semiotic redesign, praxis, multimodality, music invention.

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Introduction

The unique nature of music in the curriculum can offer particular opportunities for learning through semiotic import that promotes cognitive growth in problem solving, critical reflection, and the synthesis of ideas. In music events children select semiotic resources of voice (spoken and sung), instruments (tuned and untuned), body language (gaze, posture, facial expressions), movement, gesture and the physical environment with its materials and structures to solve problems in how to redesign these in music dialogue. Other resources accessed by young children include digital music, and formal resources of music elements or concepts (pitch, rhythm, dynamics). All resources contribute to children's co-construction of meaning. However, they are not always used in conjunction, but rather are selected by children in specific combinations for particular uses in situated classroom practice.

While interactions in this study occurred between children within a framework of open-ended music invention, the teacher/researcher sometimes lightly scaffolded these music events by accessing and preparing school instruments (such as taking notes off the xylophone and leaving others as a pentatonic scale). At other times she asked leading questions or made suggestions, but children always led with ideas and selections of resources. Jorgensen (2002) elucidated ideas of music learning through interactive enquiry, creativity and meaning making. She rejected curricula or methods founded on rational and sequenced development

of musical concepts. Rather, she outlined perspectives of children's development that emphasised mutual discovery between teachers and children based on different ways children make meaning of self in the world, and cultural constructions reflecting ways of meaning making (Bruner, 1986). This study also revealed children make discoveries with peers alone.

Recent research into children's composing gives insight into their musical development, just as text construction gives insight into literacy. Mapping of children's creative music strategies and pathways has been attempted (Burnard & Younker, 2002; Diagnault, 1996; Wiggins, 2003; Younker & Burnard, 2004). Underlying patterns and modalities of thinking were investigated (Young, 2003, 2009, 2010) and children's compositional products (Barrett, 1996) and aesthetic approaches (Barrett, 1998; Kratus, 1994). Assessing creativity in compositions was attempted (Auh & Walker, 2003; Hickey, 2009; Webster, 2003). Children were investigated composing with computers (Mellor, 2009; Seddon & O'Neill, 2001) and constructing collaborative compositions (MacDonald & Meill, 2000; Morgan, Hargreaves & Joiner, 1998). Marsh (2008) developed a case for open-ended process-oriented music creative practices. Investment in culturally situated resources in classrooms where value adding and identity building is encouraged in music inventive practices have been advocated as an approach to music invention (Bowman, 2002; Custodero, 2009; Green, 2011 and Harrop-Allin, 2010, 2011). Children's agentive inventive music practices in home and community contexts have been investigated, along with their implications for pedagogy (Barrett, 2005b, 2011). Barrett (2005b, p. 261) has urged for more research in music education to "investigate children's experience and understanding of music," particularly their conceptual knowledge. Young (2003, p. 56) also highlighted the need for ongoing research that looks at "the inter-sensory whole" of music – instruments, voice, materials and movement, to investigate "forms of organisation that are identifiable and competencies they imply, so that appropriate provision and pedagogic strategies can be designed."

This multiple case study of themes – music dialogue, transformative redesign and transmodal redesign in classroom music invention – is part of a larger study of music inventive practices of five-year-olds in classroom and home events conducted over six months. This study aims to further understand how young children in a rural school use modes interacting in dialogue as forms of organisation and redesign of meaning to assist their development of conceptual knowledge in music events. The question of concern in this study is: "How are children's selections of semiotic resources and interpretive redesign of modes in classroom music invention realised?"

The Praxis of Music Education: Music Identity and Redesign of Meaning

Because situated cultural forms of expression involve choice of resources in artistic composition processes, praxis in music education (as opposed to aesthetics, the study of music as art or object) was important to this study. Articulated in detail by some authors (Barrett, 2011; Elliott, 2005; Green, 2008, 2011; Regelski, 2000, 2004, 2005(a), 2005(b); Swanwick, 1979, 1994), this philosophy is held by many music researchers. It is concerned with the production, study and appreciation of music in contexts (Regelski, 2000, p. 16) and emphasises the action of music making. Regelski (2004, p. 17), a cultural critical theorist, took this further to define "praxis as embodied knowledge and experience" in music. He recommended accessing cultural affordances for composition practices. As Green (2008, p. 185) argued, the approach to music education that "validates embodied knowledge, competencies and experiences" gives value and voice to children and their music, enabling them to participate in building curriculum knowledge and to enrich and extend their learning.

Robinson (2001) noted that rich, contextualised learning promotes higher thinking skills involving critical engagement, reflective practice and creativity. Recent research demonstrates that these broad literacy skills are developed through everyday embodied and creative interactions (Newfield & Stein, 2000; Pahl & Roswell, 2012; Van Leeuwen, 2005). Because musical experiences are complex, elusive, transitory (never the same), and diverse, the different manifestations of music should shape educational procedures and common constructs (Harrop-Allin, 2011; Swanwick, 1979, p. 40). Community music activities and home practices connect with children's identities (Green, 2008, 2011) and their resources (Temmerman, 2005; Marsh, 2008, 2011). Both are essential to enrich and consolidate learning in classroom contexts, promoting music and language literacy. Learning and conceptual understanding is inseparable from practices (Kress, 2003).

A body of research has also acknowledged children's created or recreated music making as being key indications of children's layered identities (Barrett, 2005b; Campbell, 1991, 2004b; Marsh, 2008; Pahl & Roswell, 2005). These researchers in music education sought to enrich children's learning experiences in classroom contexts by investigating their meaningful music making in out-of-school situated practices. O'Toole (2005, p. 297) argued this is "a primary reason for music making is identity affirmation." This was particularly relevant when considering the meanings of children's actions and perspectives during musical inventions. She asserted that context is the playground for identity formation, for our senses of self are subjective, reliant on the worlds we live in, not independent of them (Butler, 1990, 2004; Foucault, 1984; Hall & Du Gay, 2003).

Newfield (2010) proposed that identity consists of the sensitive action of learners' sign making activity. A child-centred teaching environment may be created by valuing and working with learners' diverse and expressive resources and identities, especially by those who "have power in the classroom" (Stein, 2008, p.152). Glissant (2001) elucidated the concept of identity as formed and extended in relationality. An elusive concept, identity is dynamic and unpredictable, dialogic and transactional (Titlestad, 2007). This philosophy of identity is based on the rhizomatics of Deleuze and Guattari (1987) where meaning making is unpredictable, nomadic and multi-dimensional. Semiotic production uses similar processes of appropriation, modification, hybridization, manipulation, invention and transformation as well as improvisation as strategies and repertories for inclusive and creative productivity.

Barrett (2005b) identified contextualized music learning in Australian urban school playgrounds as musicianship in communities of practice (Lave & Wenger, 1991), examining children's musical interactions from a socio-cultural perspective. She emphasised "members have agency, and thus take up, resist, transform, and reconstruct the social and cultural practices afforded them in and through the events of everyday life" (Barrett, 2005a, p. 189). Barrett contributed to an understanding of how children learn within the practices of their games in situated contexts. She maintained that future research in music educational policy and practice should "investigate children's experience and understanding of music" (Barrett, 2005b, p. 261). She critiqued current educational practices: "Too often a deficit view of children's musical ability pervades teaching and learning interactions in school settings, as educators measure children's musical ability solely against the communities of musical practice extant in the adult musical world" (Barrett, 2005a, p.189). Marsh (2008, p. 12) acknowledged children's music making as difficult to capture, and always in a state of change and transformation, because they were embodied performances in context, not fixed texts. Significantly, she demonstrated that the nature of learning, teaching and identity construction in and out of classrooms is fluid and interconnected through the sharing of musical tastes (Marsh, 2011).

In terms of music praxis in education, Green (2008, p.13) wrote of "the difficulty of incorporating music from one culture into another, the challenges of adopting, within formal education, music which is transmitted outside formal education; the lack of fit between the cultural assumptions that surround music and musical practices in different cultures." She considered "how pedagogy in the music classroom could draw upon the world of informal popular music learning practices outside the school" (Green, 2008, p. 1), noting that several musical identities in one individual develop and change over time (Green, 2011). Through situated case studies, she concluded that all learning involves interaction with the physical world, family, friendship, the media as well as conscious study and application.

More recently, there have been studies that incorporate the forms and musicality of children's situated games in multi-literacy pedagogy within the general classroom. Harrop-Allin (2010) proposed that the gap in classroom music education is the need of teachers for tools with which to "engage with musical play" (Harrop-Allin, 2011, p. 158). She observed: "the absence of a sound methodology for incorporating or accounting for children's musical practices in pedagogy is evident in much of the music education literature that engages with children's music" (Harrop-Allin, 2010, p. 36). In studying Soweto playground games and interactions in situated music making she concluded that culturally shaped materials, resources and inspiration in music education reside with the children and their identities. She suggested they should build on forms and competence displayed in their games to reconstruct meaning in classroom contexts, assisted by teacher scaffolding. "Giving 'voice' to children's music acknowledges that children not only inherit but also create culture and new forms of literacy." It "can create ongoing learning in a developmental, 'future-orientated' process" (Harrop-Allin, 2010, p. 306).

In an Australian study, Darian-Smith and Henningham (2011) recorded in great detail the change and continuity of children's schoolyard games and activities to make them accessible for use in classroom contexts. In other recent studies, pedagogical settings were structured so that writing and exploration of multimodal meanings could be engaged simultaneously. It was found that children participating in these settings developed a broader repertoire of meanings and means of expression (Gallas, 1994; Rowe et al., 2003). This was evident as children collaborated and discussed their composing resources drawn from alternative and culturally rich modes introduced into the classroom (Kenner & Kress, 2003).

A number of positions have contributed to the value of syncretism in classroom practice and the conclusion that minority or hidden literacies are crucial for learning. Barrett (2011), Green (2011) and Harrop-Allin (2011) demonstrated the importance of investigating children's prior understanding and experience, to inform educators of the value of agentive interaction and contextualised learning. Their views were based on the idea that identity is multifarious and changes over time (Deleuze & Guattari, 1987; Glissant, 2001). The representation of children's situated cultural experiences in classrooms appears to rest in its potential to reveal competence in creative, innovative thinking through embodied transformation of resources based on interest (Kress, 2011; Newfield, 2010; Stein, 2008). This hypothesis needs further investigation in relation to children's music invention in the classroom context. Pedagogic frameworks are insufficient unless they appeal to the creative capacity of children and build on their complex and plentiful music inventions made in playground games and out-of-school practices (Barrett, 2011; Custodero, 2009; Darian-Smith & Henningham, 2011; Green, 2008; 2011; Marsh, 2008). This gives children space to play with ideas in scaffolded classroom activities, featuring children's transitory music events.

Social Semiotics, Modal Redesign and Learning

Children's orientation towards learning through the principled, motivated and agentive selection of resources to remake meaning was observed in recent studies (Kress, 2003; Mavers, 2011; Pahl, 2007 and Van Leeuwen, 2005). These social semioticians agreed that choice of mode is seen to have an effect on the production of meaning (Kress & Van Leeuwen, 2001, pp. 99-127). Different modes were seen to shape knowledge in different ways because the interpretation of knowledge is shaped by the agent's choice of or disposition towards a mode. Kress (2003, p. 52) stated that meaning arises from "affordances," the cultural "potentials" and "limitations" of modes in material representations. Jewitt (2009) reinforced the significance of identifying participants' use of affordances in diverse learning environments. She noted that in social semiotics meaning making is foregrounded by agencies through specific concrete, sensory, material and embodied acts in situated contexts. Modal representations in social semiotics do not convey meaning through abstract representational systems or cognitivism, usually attributed to reading and writing. Children use embodied resources for redesigning familiar music material and ideas to make meaning. Language is not the central focus for learning. As examples in this paper demonstrate, different modes are different ways of transporting a message and allow for choice in different shaping of resources. Signs are motivated (Kress, 2000a; Van Leeuwen, 2005). The sign is the product of interested action. Agentive action shapes the sign and the relationships of power (Kress, 2010).

Building on the social semiotic gives structure to this study: focus is on domains of *transformative* and *transmodal* redesign in music dialogue in lower primary school. The term music dialogue is central to this study and developed for the purpose of investigating children's co-construction of meaning through selections of modes and redesigning these resources within a multimodal context. Semiotics provides a lens through which children's music events are examined to reveal complex micro interactions. Semiotic resources include voice, instruments, media, movement, gesture, gaze and proxemics. Formal resources are the conceptual elements of pitch, rhythm, meter, dynamics, tempo and timbre. According to Green (2011), Kress (2011) and West (2009) there is need of more specific in-depth analysis of young children's music learning through examination of their use of semiotic resources for redesign. No full study of transmodal and transformational redesign has been done in the field of young children's classroom music invention, within the space of music dialogue. Harrop-Allin (2010, 2011) analysed children's playground games using a framework of social semiotics and related the forms of children's musical play to multiliteracy practice in classrooms. She acknowledged the need to address the silences in the literature of music learning and pedagogy through further studies of children's use of semiotic resources for music redesign.

Orientation towards learning through principled and purposeful selection of resources has been observed in studies by Kress (2003) and Mavers (2011). "Children have a social and personal investment in the symbolic meanings of their culture right from the start, and it follows that their engagement with them is likely to be always intentional and purposeful" (Lancaster, 2007, p. 125). Semiosis is a term referring to contextualised text-making practices or the ways in which texts are the expression of cultural knowledge, beliefs and practices (Jewitt, 2009). Their sign making has constraints as they make selections using materials "to hand" (Kress, 1997) and are possibly influenced by both convention and cultural practices.

In social semiotics, activity occurs across modes as well as in one predominant mode to redesign meaning (Jewitt, 2003; Stein, 2003). Transformation (Kress, 2010, p. 43) involves "changes in ordering and configurations of elements within one

mode." *Transformative redesign* is a thematic case in this study. It is the "interested action" "of socially located, culturally and historically formed individuals, as the remakers, the transformers and the re-shapers of the representational resources available to them" (Kress, 2000a, p. 155). *Transmodal* semiosis is a process where modes of representation or communication are changed, where "there is a change of meaning expressed in one mode to that expressed in another" (Kress, 2010, p.43). The *transmodal moment*, a metaphor for the occurrence of a shift of thought or feeling, is also understood as being relational to other periods of history and other ways of expressing ideas and experiences (Newfield, 2010). Choice of familiar cultural forms of expression encourages self-reflexivity and gives shape to meaning, bringing composing processes to life. There is opportunity for metacognition. This has a pedagogic impact and can be seen as the way that children redesign meaning in music dialogue.

Kress (2000b, p.154) noted that the process of transduction through change in meaning across modes is something that simultaneously involves cognitive and embodied meaning making. It has an external manifestation in transmodal redesign. *Transduction* is a thematic case in this study. It is an involved process of moving material from one mode to another (from speech to music, or from writing to film) that does not involve mere translation or transference of meaning. Inner semiosis, or children's internalised representations of meaning in thought processes, is synchronous with their external actions as the child selects materials for redesign. This involves a "transduction" process that is not just "translating, but is in itself transformative" (Kress & Van Leeuwen, 2001, p. 5). Transmodal redesign has been observed in children's redesign of literacy texts (Gutiérrez et al., 1999; Newfield, 2010; Pahl & Roswell, 2006) and in their multimodal music dialogue where music practices are used in different spaces and across sites or contexts (Harrop-Allin, 2011). Children's extended interaction when motivated by the exercise of choice in multimodal events has also been demonstrated as enhancing their expressive vocabulary as they reflect on meaning and form during moments of *transmodal* authoring (Rowe, 2003).

In conclusion, in multimodality and social semiotics theory, inner semiosis, or children's internalised representation of meaning in their thought processes, is synchronous with their external actions. Together these form the space of music dialogue. Children select materials to represent the same meaning but in different ways, using different modes. In *transmodal* semiosis the principal modes of communication are changed whereas through *transformative* redesign of resources embodied representations are made in one mode, based on interest (Kress, 2010; Newfield, 2010; Stein, 2008). Selection and redesign of modes assists children's formation of musical identity through increased conceptual understanding.

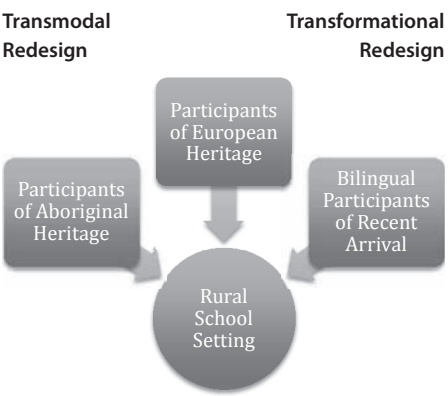
Methods

Studies that apply a social semiotic framework and multimodal analysis to the investigation of early composing processes are still few in number (Bezemer & Mavers, 2011; Flewitt et al., 2009; Kress, 1997, 2009; Mavers, 2007, 2011; Ranker, 2009). This case study explored music invention using multiple methods of data collection (videos of small group classroom music activities and home music events taken by the researcher as educator; parent/sibling videos of home music invention; field notes; recorded discussions with parents and children) to build a thick description (Feagin et al., 1991). The data sets contributed to "the complete literal description of the incident, action or communicative event being investigated" (Merriam, 1988), honouring the specificities of the case. Voices, feelings, actions and meanings of interacting individuals (Denzin, 2002) were featured through the researcher's engagement and empathy in classroom music

composing events. These case studies were instrumental, aiming to contribute to a "better understanding and perhaps better theorising, about a still larger collection of cases" (Stake, 2005, p. 446).

This study was part of a larger case study of three classroom locations: inner city, private college in suburban location, and a rural school (this study). Music inventions were examined through thematic case studies of transmodal redesign and transformational redesign. Video transcriptions of classroom and home music events, open-ended interviews of parents and participants, observations and field notes comprised the data sets. Video data was selected for analysis according to categories of transmodal or transformational redesign of music dialogue (cases nested within the broader case study). Within the rural classroom setting of this study there were participants of Aboriginal and European heritage and a bilingual student of recent arrival from Brazil. Repetition of characteristic patterns of interaction and redesign were evidenced in the analysis of videos from classroom composing events. Interactions were transcribed as dynamic, embodied actions, not "static" representations of speech turns. This method allowed patterns of dialogue to emerge with coherence and consistency between different modes: from explicit and direct information to oblique representations of meaning.

Figure 1: Nested Case Study Design.



In music, elements or features of percussive or lyric effects, dynamics, timbre and tone, pitch, meter, rhythmic variation and harmony are all important for making meaning and for redesign. In this study, they became ways for identifying modal redesign and how meaning was translated or made across modes. Modes of writing and drawing are not, like those of speech, music and dance, temporally instantiated. Sound resources vary in pitch, rhythm, duration, volume and intonation, and often incorporate silence (Van Leeuwen, 1999). There is conveyance of different dimensions of meaning to representations of visual symbols. All modes interacting "in dialogue" assist in the redesign of meaning during music invention.

Video clips were transcribed used overall descriptive functions of cognitive, affective, motor and social interaction taking place (Rostvall & West, 2005). Tabular or synchronous and diachronic mapping facilitated temporality and modal separation for analysis (Bezemer & Mavers, 2011). This study used a system similar to that of a music score. Embodied meaning (gaze, gesture and posture) was transcribed by still images superimposed with dialogue to represent speech and eclectic responses (Norris, 2004, 2009). They focussed on bodily action, gesture and interaction (Bezemer, 2008; Kress & Van Leeuwen, 2006). Representation of speech and/or sound was sometimes placed above these images if these became principal modes of conveying meaning. A variety of transcription methods aided identification of emerging patterns across cases and contexts using all modes in context (Bezemer & Mavers, 2011). Transcriptions of video data approached as artefactual evidence was seen as useful for analytical purposes, and for the building of an argument. Choices were made to "shape the account of social interaction in significant ways" (Bezemer & Mavers, 2011, p. 203). This method highlighted moments of particular attention and simultaneity, such as types of bodily configurations: the micro-ethnographic (Bezemer, 2008; Erickson, 2004).

There are enormous benefits to the use of video recordings, in that they are durable and shareable records to be viewed repeatedly (Jewitt, 2011). As noted by Knoblauch et al. (2006, p. 19), they represent a real-time sequential medium that "preserves the temporal and sequential structure of interaction" which is so characteristic of music invention. Recordings provided a fine-grained data that could be analysed frame by frame or in seconds, where music is kept in context with modes of gaze, body posture, facial expression and gesture.

Discussion

The study investigated the evidence that redesign through the selection of semiotic resources in music invention has lasting and transforming effects on children's music education. In particular the redesign of modes realised in classroom music events was captured and shown to be effective for promoting children's conceptual understanding. Through music dialogue, the interplay of modes and children's selection of semiotic resources were evident as children co-constructing meaning. Transformative practice with semiotic resources of physical materials (instruments and voice), and conceptual resources of elements of music (pitch, rhythm, dynamics and phrasing) was traced. Attention was made to material representations.

Socio-cultural resources of family, and familiar musical styles – folk, pop or classical – were traced in participants' music redesign. Musical instruments, and the physical space, assisted with children's formation of music identities and music concepts. Modal redesign occurs as children select resources to co-construct meaning. Through these domains of situatedness, identity and modal redesign - the space of music dialogue - children's conceptual knowledge was identified, their processes of refining understanding through redesign. Transcriptions reflected the researcher's reading of the data in particular ways, using multimodal analysis.

The space of music dialogue was examined in this paper in classroom music events that incorporate paired, solo or small group interactions. In collaborative explorations of music

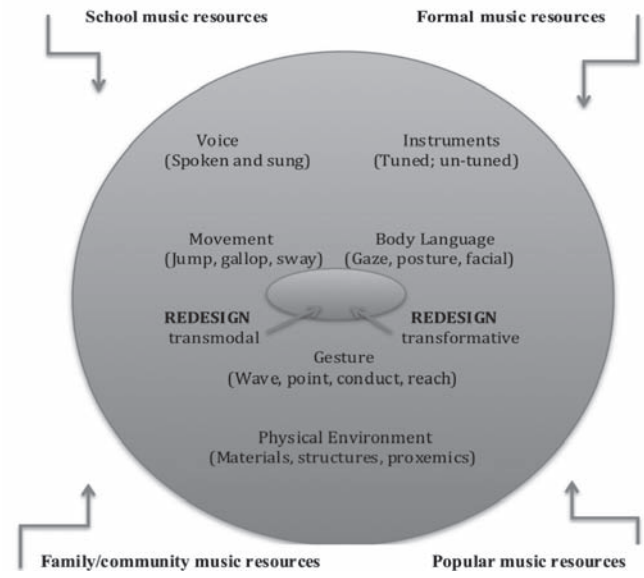
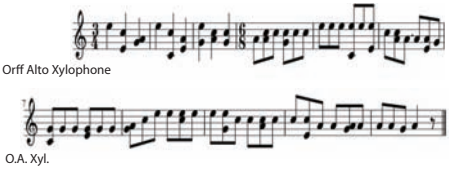


Figure 2: The Space of Music Dialogue.

transformation, Edward and Anna invented duos on the Orff alto xylophone that were rhythmically complex, alternating with one keeping a beat while the other played syncopation, then vice versa. Edward introduced a rhythmic motif that contained elements such as repeated quaver notes, while Anna kept a steady beat that changed to an "off-beat" syncopation with wide intervallic leaps between the notes. This playful dialogue involved using a limited melodic range on their xylophone on C-E-G-A over two octaves. Proxemics in interactions caused contrasting rhythmic ideas and changing time signatures (Anna added beats 2-3 in ¾ time bars 1-2, and syncopation on beats 2 and 5. Edward played the upper register. Arm movements influenced the direction of the melodic line (see Transcript 1).

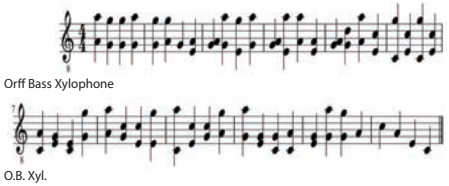
Transcript 1.



Transcript 1 Edward and Anna's Transformative Redesign

Bob and Millie by contrast quickly settled into playing the beat simultaneously while varying the notes within the same range (Transcript 2). Various music activities in the school lead up to this event, required them to keep a beat with clapping or body percussion while singing. New rhythmic ideas and melodic patterns emerged as they "fitted in" with each other, so proxemics was important in influencing their playing. While referred to as music dialogue between two peers, this was dialogue that did not take turns in space and time, but in responses through imitation and extension of each other's ideas. Millie played the high register but they often crossed over registers or played in contrary motion. The music score and still images were equally important for transcribing this event. Descriptive analysis was secondary, supporting meanings conveyed by the salience of image and music. Image captured gaze, gesture and facial expression, all crucial to co-constructing and transforming meaning in this creative music invention (see Transcript 2).

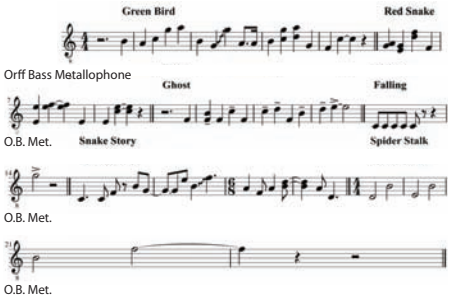
Transcript 2.



Transcript 2 Millie and Bob's Transformative Redesign

In one music event, participants were asked to volunteer to recount an experience or event in their life. Transmodal redesign of such experiences, initially verbally inscribed, occurred as they were later communicated musically on a metallophone. The essence of the experience was captured, not the sequence of events. A short musical phrase was sufficient to immediately shift previous verbal representations, giving the experience new meaning. Tracey's flying bird became a repeated sequence of three notes below the tonic, then a rising glissando followed by a repeat of the low sequence in diminuendo, finishing on the tonic. Transcriptions used a music score to convey music as the principal mode (see Transcript 3).

Transcript 3.



Transcript 3 Metallophone Event

Anna captured ghost-like sounds by softly striking the bass metallophone and playing minor seconds in rising sequences, finishing on the supertonic and leaving her story unresolved. Daniel made two darting, sharp, striking movements with his mallets, each note in turn, followed by two notes simultaneously, as a repeated motif with variation. This strongly expressed the terrifying "red snake lying in the grass" then "biting my baby sister." He demonstrated sophisticated awareness of structure and repetition in music texts. Leighton "saw a red-back spider at my home – in the bathroom," capturing this with back-and-forth consecutive fourths and fifths, (C-G, D-G), a repeated G, then a final high, suspended E.

Edward "falled over – you know those cement steps – and I hurted my knee." He expressed this on the metallophone by first scanning the whole range visually, then repeating the lowest note six times, following it with one high note at the top of the range. The individual symbolic representations of experiences, first expressed in the mode of speech, were transducted and transformed into the mode of music on the metallophone by selecting salient features of pitch, dynamics, rhythm and phrasing. There was a shift in meaning as the children captured their experience in the mode of music.

In another classroom music event Tracey, who had recently arrived from Brazil with English as a Second Language, was challenged while verbally expressing in English her account of an event with an owl that fell from a tree, and a little boy who saved it. However, she fluently transformed the verbal account into music. Her verbal account came to life through transduction into a musical as she led the small group of participants. As "director" of a music drama, she requested each participant to select a percussion instrument. Together the children reconstructed meaning through choice of ways to play their instrument by exploring the contrasting affordances of xylophones, drums and guiros. Tracey's purposeful choice of who should play and in what sequence was based on visual, aural and gestural clues. Sometimes she watched a participant and chose them for their awareness and eye contact. In this way she chose Sandra as the little girl who saved the bird (changing the content of the previous story). Through listening to the disjunct or opposing sounds provided by the bass drum and guiro, she added more complex elements to her story (Transcript 4). These were the crocodile and the kangaroo (the latter being chosen as a motif running through the entire piece, these participants keeping a steady beat). This event was an example of transmodal redesign from speech to music. The decisions of Tracey and her friends were made using purposeful ideas to advance the story and bring it to a riveting climax. There were many levels of complexity in choice of music elements and interaction of modes in a multimodal ensemble of meaning. The music event was an effortful artistic expression of an experience.

The use of musical instruments transformed Tracey's conceptual and communicative capacity, for music was a familiar cultural resource with which to make meaning in everyday interactions. Her story was transducted in this mode: movement, crisis and change were achieved through sound (a box drum represented the kangaroo, the timbre of the metallophone with high, light sustained sounds represented a "saving" of the owl by the little girl; the guiro suggested danger and the bass drum - crocodile - provided tension and climax). Tracey realised the counterscript suggested by Daniel, gazing at him and weaving the bass drum into a climax involving a crocodile, adding other drums for a crescendo effect. Apt selections of resources and ideas made music the principal communicative mode. Children combined elements of music in a moment of transmodal redesign where speech was secondary to timbre, phrasing, dynamics, silence and beat. Still images in this transcription (Transcript 4) revealed gesture, gaze, proxemics

and facial expression occurring in simultaneity as modes of communication. However, Tracey primarily oriented to sound and affordances of instruments to solve problems, achieving a shift in conceptual understanding.

At home, Tracey used digital music recordings for singing and dancing. Her Brazilian heritage movement to music was an ongoing celebration of life. She performed nursery songs and rhymes taught in school, and attended ballet classes. These modes of interaction were as essential as language in making meaning during communication. She made selections from technical resources (affordances) of instruments, formal resources (affordances) of music elements (duration, pitch, structure, dynamics and tone colour) and speech turns. Composing music events can provide bilingual children newly arrived in Australia the opportunity to co-construct, resist, transform and reinvent their sense of the world from home to classroom.

Transcript 4 Tracey's Music Event

Tracey: "There was a owl that couldn't fly and it needed wings. I need Sandra, Millie and Sophie." Sophie began scraping the guiro, setting a steady beat, while Sandra and Millie played the metallophone. Tracey, listening, selected participants and instruments to shape her account and was deliberate and swift in her decision-making.

Tracey: "Stop. Now Daniel, Bob and Edward." Edward played a steady beat on the bass drum. Bob and Leighton decided to represent the kangaroo by choosing the box drum and playing a steady "hopping" beat. This was a cohesive thread throughout the event.

Sandra played the metallophone musically at Tracey request. She was "the little girl who saved the owl that couldn't fly." The timbre provided a foil to the drums.

Daniel playfully initiated opposite sounds to resist Sandra's solo. The low resonant timbre of the bass drum suggested a crocodile to Tracey, who altered the storyline.

Tracey "hid" from the "crocodile" as she directed her gaze at "him". She directed everyone to play in crescendo, then concluded: "The kangaroo rescued the little girl from the crocodile."

The conclusion to the event included a kangaroo rescuing the girl, the boys playing hopping sounds on the drum and accents on the cymbal. Tracey exclaimed: "Stop!" The sounds faded away at her gesture in a ritenuto and diminuendo to conclude the co-constructed music event.

Conclusions and Implications

Thick descriptions of music using thematic categories of semiotic redesign revealed children's purposeful selections of semiotic resources in music dialogue. It was found that selections involved a process of negotiation in not only what materials to use in transmodal redesign from speech mode to music, but also how children's use of these materials in redesign could extend and expand their meaning making and capacity for music invention. Children were innovative in providing musical ideas or motifs, interacting by cross-rhythmic dialogue. During music invention, they constantly referenced elements of music. They featured, rearranged or expanded these elements/concepts through the affordances of instruments and were engaged in redesign by orientation to the sounds in the mode of music.

Young children's selections of semiotic resources in music play were found to be multimodal, combining technical resources (instruments, voice) and other material resources (gesture, gaze, bodily action, proxemics) influenced by social and musical experiences. They used complex semiotic work to shape meaning in musically inventive practices during interactive classroom activities. This involved interplay of communicational modes - familiar and embodied representations of their ideas - for interpretation, redesign and reproduction (Mavers, 2011). Use of a social semiotic lens and multimodal analysis revealed how children creatively and flexibly negotiated and communicated, using previous conceptual knowledge to strengthen music dispositions through interpretive redesign in the arts, and shape new experiences through music. Analysis of video data of children's music dialogue revealed their capacity to redesign music texts in exploratory discourse, featuring embodied actions.

In summary, children were found to be competent in ways they selected semiotic resources to construct and communicate meaning in inventive music practices. Their innovative use of embodied resources transmitted experiences and ideas through music invention. Preliminary results should be useful for policy and practice that enriches young children's learning with multimodal programs that are inclusive of and sensitive to material and embodied musical representations of knowledge. The pedagogy of music was seen to operate in transmodal and transformational redesign in educational settings as a hermeneutic practice that developed new ways of selecting music materials and resources through interpretive music dialogue. Transmodal redesign was particularly marked by student ability to shift meaning to a new level of conceptual understanding. In music events discussed in this study meaning was richly inscribed in a multimodal ensemble that indicated the interest, engagement and transformative redesign capacities of children in creative music invention.

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