In this project, we explored a number of ways into this problem in order that we may be able to develop artistic procedures for new performances that relate in credible ways to early modern drama. We examined a number of contexts that could offer clues to how early modern actors behaved onstage, including: textual evidence from a script; visual representations of movement from the period; other art forms such as music of the period; costume; staging practices of the period as they are currently understood; and relevant cultural, scientific and philosophical concepts from the period. Our overall aim was to develop a procedure from comparative analysis of these contextual clues that would serve in the creation of a new performance.

Hamlet and ‘distemper’

We chose Hamlet as a key text in the history of early modern performance. Two performances (11MF) looked at scenes from the play with the principal investigator. While little direct or unambiguous evidence was found indicating how actors should behave in relation to this text, we found two related terms used in the text: ‘temperance’ and ‘distemper’.

Hamlet speaks of actors performing their action with:

’a temperance that may give it smoothness’

His public displays of behaviour, considered to be excessive or lunatic, are described as a kind of ‘distemper’. In 1600 distemper referred to a disturbance in the body’s humours. The humours being the substances contained within the body which if disordered or disproportionate would throw the body out of balance.

Associated with behaviour, humeral imbalance was thought to be the cause of jery bodily movement that lacked restraint and poise. The origin of these related words is in the Latin ‘temperare’ (to mix or restrain) which itself is derived from ‘tempus’, meaning ‘time’.

We decided to pursue the idea that Hamlet’s (legendary) distemper could have been demonstrated onstage from the perspective of a disturbance in the rhythm or duration of an action or activity, considered in relation to temporal normality.

What would this norm have been, and is there any continuity with an idea of ‘normal time’ in our own culture?

Melancholy as ‘broken music’

We also investigated the context of early modern theories of ‘melancholy’. This was a general term that covered a range of behaviours which can be categorized as evidence of psychological ‘abnormality’. Although in some cases melancholy appears to have been little more than a fashionable pose among the elite, we found enough evidence from visual and textual representations to allow us to hypothesise that a key indicator of a melancholy state would be failed communicative musicality.

In other words, dysfunctional intersubjectivity, or lack of empathy in social interaction, is indicated by communicative arrhythmia, in which participants appear to be ‘out of time’ with each other. This failure is a feature of several scenes in Hamlet where social misunderstanding takes place. Hamlet considers that the ‘time is out of joint’ and that it is his duty to set it right, while in Richard II, King Richard refers to ‘broken music’. We considered also how the psychology of melancholy may be related to new ideas about astronomy emerging in the latter sixteenth century, and how the centuries old idea of ‘the music of the spheres’ was in the process of being displaced by the mechanistic rhythms of the Newtonian universe, as for example in Seronino’s painting of ‘The Melancholy Astronomer’.

Linking Theory and Praxis

In our search for a possible continuity with the contemporary era, we looked at autistic spectrum disorder as a paradigm of intersubjective arrhythmia. In particular we were interested in autistic empathic behaviour, a feature of autism, may be reinforced or even produced by a failure of communicative musicality.

Drawing upon personal accounts and video footage of individuals with Asperger’s syndrome as well as the work of Malloch helped us to clarify our understanding of how the capacity to read and respond in socially appropriate ways to the subjective behaviour of others is mediated by a shared sense of ‘normal’ rhythms, which we suggest are defined in relation to the third second window of temporal integration. We believe that early modern culture also relied upon this time window as a way of (perhaps subconsciously) categorising behaviour such as melancholy as abnormal.

We suggest that the rhetorical properties of social interaction are understood to be more reliable indicators of abnormal social behaviour than the actual content of the behaviour itself.

Subjectivity/Intersubjectivity

To study the rhythm or arrhythmic properties of human interaction we looked at the work of psychologist Colwyn Trevarthen and Stephen Malloch.

They provide a theory of ‘communicative musicality’, in which subjectivity is defined as how the individual consciously displays bodily control of their intentionality, and intersubjectivity refers to how this subjectivity is adapted to fit the intentional displays of an interaction partner.

Trevarthen demonstrates that the capacity for intersubjective behaviour is innate and is evident from early infancy. These definitions we found to be very useful because they focus the argument away from abstract and contestable notions of ‘self’ and ‘other’ and onto the rhythmity of non-verbal behaviour, i.e. upon the ‘flow’ of interaction. Malloch maintains that the processes of intersubjectivity are essentially psychological.

This means that intersubjective behaviour exhibits the same periodicity and relationship between accentuated and unaccentuated material that is characteristic of a musical rhythm.

Whilst studying the work of experimental psychologist Ernst Pöppel, we discovered a key for the understanding of ‘communicative musicality’. Pöppel’s work points to a significant number of behaviours that are organized within the ‘time windows’ of approximately two to three seconds.

This temporal integration is a very basic feature of short term working memory. Intersubjective gestures have a foundation of intersubjectivity, and are most important for our study – and of spoken poetry such as the iambic pentameter that is a feature of much of Hamlet.

Pöppel also claims that musical motives tend to have a preferred duration of around three seconds. To test this, we timed several pieces of early modern music in different recordings, such as John Dowland’s Lachrymae. We found that the musical motives we identified were almost invariably contained within a three-second window.

If the typical duration for rhythmic intersubjective exchanges is two to three seconds, then ‘distemper’ could be defined in terms of deviation from this duration. The behaviour witnessed by an audience would be deemed, perhaps even at a subconscious level, to be ‘wrong’ in the sense of being too fast or too slow to be appropriately appropriate, that is, as a sign of subjective control adequate for meaningful interaction.

The next stages: motion capture, and further impact

We worked upon an initial presentation of new material towards a performance. The performance, called ‘Hamlet: Appearance’, was an attempt to take some of the indications of our research towards a procedure for original artistic work. A musical score has been specially written for the performance by UClan lecturer Nicholas Casswell, as well as a script by the principal investigator, Darren Tunstall.

We also made use of motion capture technology to produce images of the movement choices of our female performer (wearing period costume). These visualisations were later translated into live motion by a motion capture system. The movements were later translated into live motion by a motion capture system. The performances were then combined with live physical movement and located within the context of the Elizabethan stage.

The themes of melancholy, intersubjectivity and communicative musicality in the performance itself were generally well received and understood by the audience. We feel the extensive research undertaken prior to devising the piece made the end result successful with potential for further research and development next year.