Abstract
Transition, an interactive gallery installation, investigates the notion of developing new art work that promotes a contemplative state. To this end we have blended new and traditional media. Transition has four primary elements: a reflecting pool containing a submerged Muqarnas (a sculpted form of ancient Persian architecture); projected animated Persian floral patterns; spoken poetry audio; and passive interaction. To fully view Transition as an installation is entirely dependent on the audience’s stillness. Considering art and science as mutually beneficial modes of inquiry, this paper details the development of the installation, its history, cultural and theoretical underpinnings, and documents how individuals and groups respond to an interaction requirement in the viewing of an artwork.

1. Introduction
Over the centuries the goal of many forms of art has been to promote a more contemplative state in the viewer. It is this goal, which is less common in new media art work, which we pursue in our installation, Transition. To do this, we explore the integration of traditional art forms with passive interaction in a single installation. Transition consists of four elements; a physical construction - a submerged sculpture in a pool of water; projected animated Persian floral patterns; spoken poetry audio; and passive interaction. The physical elements in Transition - the reflecting pool, animations and audio, were chosen because of their relationship to change. The intent of the piece is to explore change and ultimately to elicit a change in the viewer. Ideally, the viewer will enter into a quiet state upon encountering the installation. The physical construction is a Muqarnas - an intricate piece of decorative architecture, immersed in a reflecting pool. Animated Persian floral patterns are projected into the pool and onto the architecture, while recorded spoken poetry is played. The interaction between the animation and the Muqarnas creates a mystery anticipated to draw the viewers’ attention. The rhythmic poetry of the audio matches the rhythm in the animation. The audio-animation pairs are intended to instil a feeling of contemplation. The rich symmetry of the architectural piece and the movement in the projections and poetry is a source of rhythmic transition between stillness and movement. When visitors enter the space, their motion causes the video and audio to switch to a new animation and poem. If viewers continue to move, the content continues to change, never getting past the first snippet. Thus, viewers must achieve physical calm in order to allow the animation and the audio to be fully realized. The intention is that this physical quietness will encourage a calm emotional and mental state. Three of the elements of Transition share a common cultural root. The Muqarnas, floral patterns and the poetry all originated in Persian culture. As the project developed we investigated different shapes, patterns and audio, and how best to present them. We evaluated options for aesthetic and structural aspects. We were sensitive to cultural biases but did not base our decision on cultural or religious grounds. Each element was removed from its regular environment and context. We stripped the Muqarnas of extra ornamentation. We also modified the elements by animating the patterns, inverting the Muqarnas and playing the poems without displaying the text. Nevertheless, the elements were removed from their regular context and placed together in to interact in a novel way. For instance, Muqarnas and Persian floral patterns are normally seen as part of a whole. Isolating and juxtaposing them creates anew context.
Additionally, Transition’s ability to respond to the passive presence of the viewer creates new meaning and unity for all these elements.

2. Elements of Transition
The elements in Transition - the reflecting pool, animations and audio, were chosen because of their relationship to change. The intent of the piece is to explore change and ultimately to elicit a change in the viewer. Ideally, the viewer will enter into a quiet state upon encountering the installation.

2.1. Reflecting Pool
The reflecting pool is the core for the piece (Figure 1). The word "reflection" can be understood as a mirror or reflection as an internal interpretation of thoughts. It is the intent of the pool, to act as a mirror of the viewer’s state and to promote reflective thoughts. The pool is a physical object which the viewer can relate to; a physical frame of reference. It centers the installation and focuses the viewer’s attention. There are three parts to the pool: the submerged Muqarnas, the water and the pool itself, which will be discussed in the following.

Figure 1 Transition installation different views.

Figure 2 Sample of the animation progression used in Transition.
2.2. Animation
Animated Persian floral patterns (geometric abstractions of plant structures) are integral to the work. These patterns have been used by artists for decorating poems, religious books, tiles, and architectural designs for more than two thousand years (Figure 2). Transition uses animated patterns for their relevance to the Muqarnas, and especially for their mesmerizing and meditative qualities. Dynamically producing Persian floral patterns visualizes the design process and existing symmetries.

2.3. Audio
The audio component reinforces the rhythm and movement of the animation. The audio is composed of the poetry of Rumi spoken in the poet’s native Farsi. The poetry of Mevlana Jalalludin Rumi (1207-1273) was chosen for Transition not only because the rhythms mirror the rhythms in the animations and Muqarnas, but also because he went through a transformation during his lifetime.

2.4. Interaction
Passive interaction occurs when the physical presence of the viewer changes the artwork. This is in marked contrast to active interaction in which the viewer must deliberately interact with the installation. Active interaction can be seen in the context of a table top, where the viewer is required to touch the table and move things around in order to interact. Passive interaction can be experienced when entering buildings through automated doors. The act of approaching a door signals it to open. There is no need to manipulate controls or contort the body to initiate the interaction, it just happens. In art, this type of interaction is facilitated by sensors who the received signals to intelligent computer system for interpretation. The interaction becomes part of the content of the piece and in the case of Transition the interaction is a primary element.