#### TRANSLATING GESTURE FROM SCULPTURE TO TEXT

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This is a collaborative practice-based investigation which aims to outline some of the key lessons and implications from a number of the uses of gesture in the sculpture of Barbara Hepworth. This mini-research project consists of this formal academic paper and a selection of digital multimedia poetry which functions as a creative-critical intervention and a component part of this paper. The digital multimedia poetry was created in collaboration by the authors in response to Hepworth's original sculpture at the Barbara Hepworth Museum (St Ives) and the Hepworth Wakefield (Yorkshire). The creative element of the investigation attempts to model Hepworth's use of gesture and in doing so translate the function of gesture from its use in a visual arts practice to a multimedia textual practice. Building on a multi-disciplinary understanding of gesture and Hepworth's own ideas about "gesture in landscape" (53), the project combines the historical and cultural implications of gesture in 20th-century sculpture with technical reflections drawn from and encoded in the practice collaboration. This project considers the gestures of the artist, gestures represented in the artwork, and gestures choreographed by the artwork (in the reader/audience/participant). The collaboration features new interactive works created specifically for the Interfaces 2017 conference where this paper was originally presented alongside some of the creative practice. The project is intended to function as a provocation raising questions about the interaction between tension and gesture in both sculptural and digital textual practices, rather than an authoritative, exhaustive or conclusive typology of the use of gesture in Hepworth's corpus (Figure 1).

# Gesture

This research project involves attempting to translate "gesture" as an art function across two very different art practices, cultures and media-forms. It draws on Hepworth's 20<sup>th</sup>-century sculpture (which is material, visual and tactile) and applies some of the approaches used to a 21<sup>st</sup>-century multi-

This paper consists of 50% traditional essay and 50% equivalent practice-as-research. The URL to access the practice is: www.newfiretreepress.co.uk/gesture (page accessed 14th May 2018).

media collaborative digital poetry practice (which is for example visual, virtual, durational, kinetic, textual and which invokes the human voice). Because of the range of practices and discourses we are trying to resolve we have opted for a wide-angle definition of "gesture" which tries to accommodate all of its specific applications in the disciplines we're bringing together and translating between.

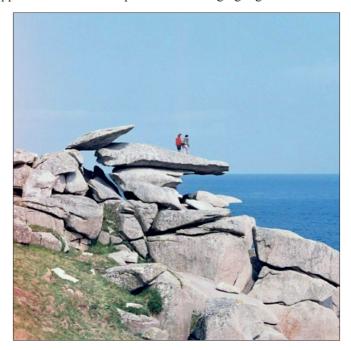


Figure 1: The researchers on St Mary's, Isles of Scilly

# **Gesture:** A shape which implies action(s)

The application of "gesture" in choreographic practice and performance arts would typically include not just the shape itself but the formation of the shape. Consider for instance this elucidation from Susanne Langer's landmark *Feeling and Form*: "Gesture is a vital movement; to the one who performs it, it is known very precisely as a kinetic experience [...]. The primary illusion of dance is a virtual realm of power – not actual, physically exerted power, but appearances of influence and

agency created by virtual gesture" (174-5). This definition of gesture in practice, which incorporates the movement of formation of shape, is perhaps the closest to the dictionary definition of gesture.<sup>2</sup> However, in the case of Hepworth's sculpture for example, it is not possible to have a direct experience of formation of shape as we are not witness to that action. Rather in sculpture, as is the case in photography and other static visual arts, the action of formation of the shape is one of the implied actions of the shape, and secondary to it.

It would also be common in performance arts definitions of "gesture" (in line with the etymological origins of the word<sup>3</sup>) for shape to be specified as body-shape or posture. This specificity does not translate well to all practices, notably in the use of gesture in music and the acoustic arts in which the shape that implies action need not be tied to the human form. This is especially apparent in those gestures conveyed in musical notation and in electronically produced sound, which do not rely on the bodily actions of a performer but rather situate gesture in the interpretative plane. Robert Hatten defines gesture in music as follows:

I define human gesture rather inclusively as any energetic shaping through time that may be interpreted as significant [...] Note that this definition embraces not only all varieties of significant human motion (including gesticulation of the hands of facial expressions) and their perception, but also the "translation" of energetic shaping through time into humanly produced or interpreted sounds, ranging from intonation curves of language, to song, instrumental music and (indirectly) the representation of sonic gesture in notation. Any energetic shaping through time, whether actual or implied, and whether intentional of unwitting, may be considered as a gesture if it may be interpreted as meaningful in some way. (Hatten 1)

This broader and more inclusive definition of shaping and its relationship with gesture is useful for our project given that we are considering a sculptural practice which does not necessarily represent the human form, and translating some of these structures to a poetic practice which uses textual shape often derived from non-human forms, and which is situated not in the medium of the human body but in a virtual space which choreographs the reader-performer. Interestingly the impact of translating this shaping function into our practice, has led to a number of the virtual works taking on a distinctly sculptural quality.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> Taken from the Oxford English Dictionary for instance: "A movement of the body or any part of it. Now only in restricted sense: a movement expressive of thought or feeling".

<sup>&</sup>lt;sup>3</sup> "Gesture" comes from the Latin "gerere" meaning to carry, reflecting the original use of the word for posture (also taken from the *Oxford English Dictionary* as above).

<sup>&</sup>lt;sup>4</sup> See for example "St Ia", "Five Syllabic Peaks" and "Strong and Stable".

The next portion of the paper outlines and defines three uses of gesture (as defined above) which we have identified in Hepworth's sculpture: gestures of tension, gestures of formation and gestures of invitation. This is not intended to be an exhaustive survey of the uses of gesture in Hepworth but rather an achievable starting point in drawing out a first typology of gesture which might be useful to contemporary arts practices.

### **Gestures of Tension**

If gesture is a shape which implies action, gestures of tension are those shapes whose implied action takes place in the future; gestures of tension suggest that something is "about to happen" and express imminence, and this is analogous to the way the term "tension" is used in narrative studies (e.g. consider the drawing back of a shower curtain in a horror film). In narratology, tension (or anticipation of the falling action) intensifies with the rising action and comes to a maximum point at the climax, defined by Prince as "the point of greatest tension; the culminating point in a progressive intensification" (1958). In physics, tension is a force and a type of potential energy stored within matter: here too a future action or movement is implied.

The tension of physics is heavily implied in Hepworth's work, particularly in the pieces which have the feeling of being held together by taut cables, as in *Wave* (1943-1944) and *Orpheus Machetes* (1956) (**Figures 2-3**); here the overwhelming sensation is the imminent flinging apart of the sculpture, should the delicate balance be unsettled or any of the cables snap – the shape gestures its explosion.

On the other hand, some of Hepworth's work implies a future action of implosion or collapse. In particular this is evident in the precarious stacks such as those seen in *The Family of Man* (1970) (**Figure 4**). These pieces, reminiscent of stone stacks in both Hepworth's childhood home in the West Riding and those of West Penwith (the Cornish landscape of her adult life), evoke the sensation that they could topple over at any moment, that they are a nudge away from collapse. Dotted along the coastline of West Penwith are a number of "logan stones" – colossal stones which can be substantially rocked in their precarious positions by even the slightest human force.



Figure 2: Barbara Hepworth, Wave (1943-1944). Plane wood with colour and strings. Hepworth © Bowness



**Figure 3:** Barbara Hepworth, *Orpheus Machetes* (1956). Copper and cotton string on wooden base. Hepworth © Bowness



Figure 4: Barbara Heptworth, The Family of Man (1970). Bronze. Hepworth © Bowness

Implosion too is an implied future action, another "about to happen" that can be read in some of Hepworth's pieces. As well as the wave forms we might also think about geological implosion, in particular the pieces *Rock Form (Porthcurno)* (1964) and *Pendour* (1947), which bear a strong resemblance to the sea-cave voids on their eponymous beaches (**Figures 5-6**). The continual attrition of water creates increasingly large voids in the rock sea-caves of the Cornish coast, leaving them prone to collapse down and inwards. Rather than inherent in matter, this tension is one of gravitational potential energy.



Figure 5: Barbara Heptworth, *Rock Form (Porthcurno)* (1964). Bronze. Hepworth © Bowness



Figure 6: Barbara Heptworth, Pendour (1947). Plane wood with colour. Hepworth © Bowness

When describing "gesture in landscape" in her autobiography, Hepworth nods to some of these forces in her own work:

In all these shapes the translation of what one feels about man and nature much be conveyed by the sculptor in terms of mass, inner tension and rhythm, scale in relation to our human size and the quality of surface which speaks through our hands and eyes. (53)

# **Gestures of Formation**

While the gesture of tension implies a future action, much of Hepworth's work also evokes the action of its formation – action that has already taken place. This gesture towards past action is not unusual in choreography and performing arts (consider for instance the clown drawing a tear on his face, expressing that he has been made sad by the previous event), but it is especially pertinent to static art forms where gesture is the gateway to the experience of formation. Put simply, much of Hepworth's work invites the viewer to ask how a shape was formed, and what the action of that formation was.

Aside from the literal sculpting work and craftsmanship involved, some works imply alternative conceptual formations. Indeed the gesture of formation of an artwork creates a dynamic tension between the gesture of the artist and the virtual formation of that being represented. In those previously discussed works which enact gesture in landscape (drawing upon waves, natural rock forms, and sea caves) the repeated actions of nature are inscribed within the form. Some of these gestures are millions of years old and refer to the attrition of massive natural forces. In drawing upon the landscape of West Penwith, Hepworth's holes and pierced forms inherit the past actions of wind, water, ice and tidal erosion.

In addition to formation by natural forces, some of Hepworth's work seems to imply formation actions of design or agency. Drawing upon landscape again, many of the rock formations in both the West Riding of Yorkshire and West Penwith look to have been "placed there", and indeed there are many parallel mythologies which attempt to explain the unusual geology of both locations. While Cornwall's Cow and Calf rocks were thrown into place by a giant demonstrating his strength, Yorkshire's Cow and Calf was created in the misstep of a giant fleeing his wife. And in both of these landscapes many of the notable rock formations *actually were placed there*; both are important sites of neolithic and bronze age activity with standing stones, circles, cup and ring marks, quoits, dolmens and cairns. Hepworth's stacked work exemplifies this gesture of formation, as do many of the form-in-landscape works, but there is also an agency implied in the formation of the cable-based works which are after all solid and secure, many of which are carved out of wood and the cables added afterwards. Despite

the actual integrity of the structure and formation story these works still look as though they have been twisted together by some extreme unknowable force.

## **Gestures of Invitation**

All my early memories are of forms and shapes and textures. Moving through and over the West Riding landscape with my father in his car, the hills were sculptures; the roads defined the form. Above all there was a sensation of moving physically over the contours of fullnesses and concavities, through the hollows and over the peaks – feeling, touching, seeing, through mind, hand and eye. (Hepworth 5)



Figure 7: Barbara Hepworth, *River Form* (1965). Bronze. Hepworth © Bowness

A third use of gesture in Hepworth's work is the gesture of invitation. In this gesture the shape invites the viewer of the work to act. How does the shape invite us to behave and interact with it? How does it choreograph movement? This is particularly evident when experiencing Hepworth's work in the outdoors, where there can be free movement of people and nature around the sculpture. At Hepworth's garden in St Ives for instance, birds bathe in the pool of rainwater that collects in *River Form* (1965) and visitors stoop and stretch to peer through holes at different angles (**Figure 7**). At the Yorkshire

Sculpture Park children can scarcely be prevented from touching *The Family of Man* (1970). Whether enacted or not Hepworth's work invites us to look through, move around, touch, insert, topple and rock.

Hepworth herself invites the audience to be embraced by the pierced form:

The forms which have had special meaning to me since childhood have been the standing form (which is the translation of my feeling towards the human being standing in landscape); the two forms (which is the tender relationship of one living thing beside another); and the closed form, such as the oval, spherical or pierced form (sometimes incorporating colour) which translates for me the association and meaning of gesture in landscape; in the repose of say a mother and child, or the feeling of the embrace of living things, either in nature or the human spirit. (53)

# Gesture as Translated to Practice

The selection of practice presented alongside this paper is designed specifically for this miniresearch project and is intended as a piece of practice-as-research which primarily speaks for itself. It
features eighteen digital poems created collaboratively which attempt to implement the three different
uses of gesture in Hepworth's work identified above. Put simply digital poetry is poetic practice which
necessarily involves the use of computational devices or digital media, and it is a subset of electronic
literature, which refers to "works with important literary aspects that take advantage of the capabilities
and contexts provided by the stand-alone or networked computer" (ELO). <sup>5</sup> This medium for poetry
affords great potential for creating virtual poetry environments which a reader can navigate and interact
with and there is a rich tradition of works which take advantage of that potential (consider for instance
"Poemas no meio do caminho" by Rui Torres). The digital poems in this portfolio all involve a visual
component and the construction of virtual spaces, hence the starting point is an affinity with sculpture.

The poems in this portfolio are web-based and use javascript and P5.JS, an open source version of Processing which can be implemented in browser with no need for additional software. Some of the poems, especially the 3D ones, are early prototypes for a Unity build which could run in VR. The whole selection of practice presented here is compatible with the most recent update of all major web browsers at the time of submission and as yet has not been optimised for tablets and mobile devices. The code is freely available using the normal view-source procedure in-browser. The selection is

See Leonardo Flores' definition from iloveepoetry.com, and the ELO's canonical portfolio "The Electronic Literature Collection" hosted at collection.eliterature.org (pages accessed 14th May 2018).

sub-divided into three categories: kinetic, static and complex. You can view it at the following URL: www.newfiretreepress.co.uk/gesture

The "Kinetic" pieces each focus on one simple 2D animation and are generally built using CSS3 animation. Both of the collaborators in this project have previously lived in West Yorkshire and South-West Cornwall, mirroring Hepworth's move and naturally drawing upon much of the same source material. The form allows a digital poem to imply a simple, historic and repeated action such as the tidal patterns in "Carnsew Channel" and the force of wind in "Gusto". In "Logan Rock" the reader is invited to (inter)act and nudge a rock, and there is intended an implied insertion in the tongue-in-cheek "Gibbous Quoit". The poem "Cheese Wring" refers to a natural rock formation on Bodmin Moor, a typically precarious Cornish stack which as well as resembling a cheese or cider press also looks as though it might tumble down:

If a man dreams of a great pile of stones in a nightmare, he would dream of such a pile as the Cheesewring. All the heaviest and largest of the seven thick slabs of which it is composed are at the top; all the lightest and smallest at the bottom. It rises perpendicularly to a height of thirty-two feet, without lateral support of any kind. The fifth and sixth rocks are of immense size and thickness, and overhang fearfully all round the four lower rocks which support them. All are perfectly irregular; the projections of one do not fit into the interstices of another; they are heaped up loosely in their extraordinary top-heavy form on slanting ground, half way down a steep hill. (Collins 42-43)

The "Static" poems most closely resemble traditional page-based poetry. Here the primary focus is on shape rather than a literal or implied movement. The first four poems are image-based and use projective verse, open form and visual techniques to create gestural textual environments; this is particularly apparent in the precarious forms in "Zennor Carn" and "Lanson" and the unstable three-line stanza in "Lankidden". The poems "Men an Tol" and "St Ia" move shape, still static, into three-dimensional space, using the WebGL environment within P5.JS and .obj 3D models.

The "Complex" poems are animated 3D prototypes to be translated in due course into high resolution interactive virtual environments. These poems attempt to bring together some of the ideas and functions from the "Kinetic" and "Static" works, and most attempt to implement one or more of the gesture functions identified in Hepworth's work. The poem "Five Syllabic Peaks" for instance draws out the vowel as a principle building block of language, inviting the reader to vocalise. The poem "Doomsdale" represents a number of histories of Launceston Castle in North Cornwall. The motte and bailey arrangement is preposterously steep and creates a sense of dread, tension and curiosity which formed the inspiration for the poem. Most of the "Complex" pieces also have their own introductions

which go some way to introducing their relationship with gesture. In general the poems are intended to invite readers to enter and disrupt virtual spaces, while simultaneously choreographing their real world movements through interface devices; they re-present gestures of material formation from sculpture, architecture and organic geological processes which often sit in tension with the artistic gestures involved in constructing virtual reproductions; and they are directly inspired by architectural and geological gestures of tension, especially rocking, falling, implosion and explosion.

### Conclusion

In the course of the research for this project, which saw us draw upon our existing personal relationships with the relevant landscapes and each other's practice (in addition to the usual bookbased research and museum visits), we have made inroads into both emergent digital poetry practice methods and our understanding of the function of gesture in Hepworth's sculpture. There is room for development in both the practice work and in sketching out a fuller typology of gesture as it functions in Hepworth's work. Yet we have begun with an identification of gestures of tension, formation and invitation, and these functions have proved a useful starting point for new collaborative practice.

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Résumé: Cet article est le fruit d'une pratique collaborative dont le but est de mettre en lumière la façon dont Barbara Hepworth rend compte de gestes dans ses sculptures. Le projet regroupe cet article universitaire et un certain nombre de poèmes multimédia numériques qui en sont partie intégrante. Les poèmes ont été créés par les auteurs en réponse aux sculptures de Barbara Hepworth au Barbara Hepworth Museum (St Ives) et Hepworth Wakefield (Yorkshire). L'aspect créateur de l'entreprise a consisté dans une tentative de transfert du geste des arts plastiques à la pratique textuelle multimédia. Nous fondant sur une compréhension globale du geste et les idées formulées par Hepworth elle-même – sa notion de « geste dans le paysage » - nous prenons en compte les gestes de l'artiste, les gestes représentés dans les sculptures, et les gestes induits par l'œuvre (avec la question du spectateur et du lecteur participant). Le texte est destiné à provoquer, par l'emploi d'oeuvres interactives, la réflexion sur les liens entre tension et geste en sculpture et dans les textes numériques, plutôt qu'à cataloguer les gestes chez Hepworth dans le but d'en faire une typologie exhaustive.

Abstract: This is a collaborative practice-based investigation which aims to outline some of the key lessons and implications from a number of the uses of gesture in the sculpture of Barbara Hepworth. This mini-research project consists of this formal academic paper and a selection of digital multimedia poetry which functions as a creative-critical intervention and a component part of this paper. The digital multimedia poetry was created in collaboration by the authors in response to Hepworth's original sculpture at the Barbara Hepworth Museum (St Ives) and the Hepworth Wakefield (Yorkshire). The creative element of the investigation attempts to model Hepworth's use of gesture and in doing so translate the function of gesture from its use in a visual arts practice to a multimedia textual practice. Building on a multi-disciplinary understanding of gesture and Hepworth's own ideas about "gesture in landscape", the project considers the gestures of the artist, gestures represented in the artwork, and gestures choreographed by the artwork (in the reader/audience/participant). The collaboration features new interactive works and is intended to function as a provocation raising questions about the interaction between tension and gesture in both sculptural and digital textual practices, rather than an authoritative, exhaustive or conclusive typology of the use of gesture in Hepworth's corpus.