Reflection

Anne-Elizabeth Orton

Contents

Introduction

The aim of this project was to continue developing outcomes from the previous body of work which utilised two digital projectors to explore issues relating to urban environments in three dimensional space. This included a focus on laser etched surface texture and alternative sources of projection.

Additional survey based research was also conducted. This aimed to continue exploring the theory developed alongside the previous work that a sense of control can be achieved through participation in environment which counteracts the negative emotions generated by aspects of urban living which specifically result in a loss of control (e.g. crime, pollution, etc).

The main focus of the work generated in this time period has been the practical development of physical process and there has been little evolution of the conceptual elements, however further opportunities for re engaging with this have been generated and the gathering/analysis of survey results has served to expand and consolidate the underpinning research.

Reflection on Practical Outcomes

Laser Etching

The previous body of work culminated in a series of plaster casts taken directly from the urban environment that were then projected on to. Despite the fact that the qualities of plaster lent a substance to the projection which successfully implied the status of object onto the light based image, it became clear that the fragility, weight and limitations on scale would prevent the material being employed in situations where larger objects might be more appropriate or it would be necessary to transport them (between shows/events etc) It was therefore necessary to explore alternatives and the initial practical development of this work consisted of a series of laser etching tests (Fig. 1-4). The aim of this was to generate surface texture to project on to in a way which could be worked at on a larger scale, would be more robust and easier to transport than plaster.

The following tests were laser etched on to 3.2mm MDF using a series of greyscale images at various opacities. These were prepared in Adobe Photoshop and imported to Corel Draw for use with the laser cutter. Fig. 1 demonstrates the results of etching onto MDF treated with acrylic primer, while Fig. 2 shows the outcome on untreated material.
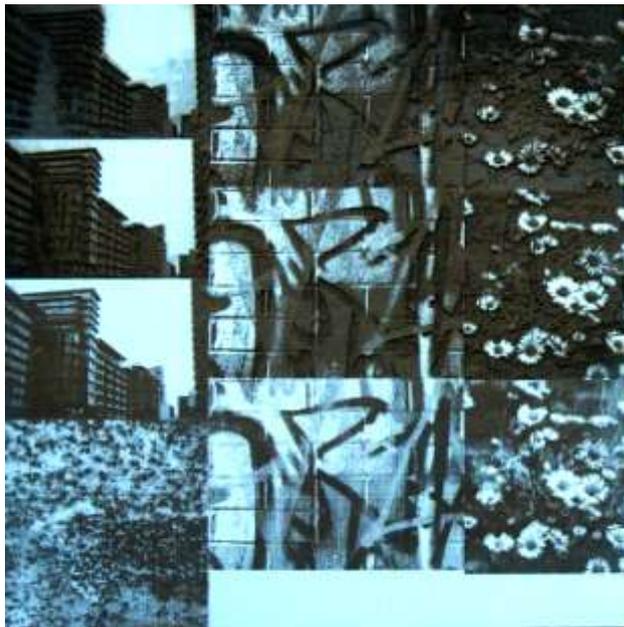

Fig. 1
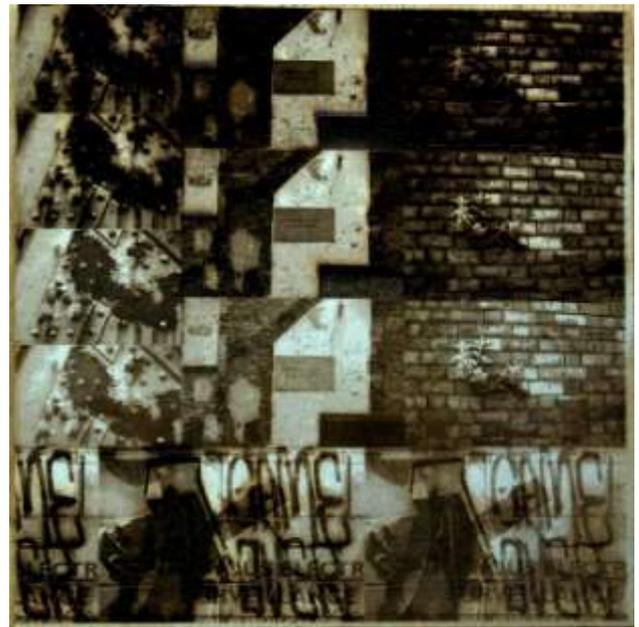
Fig. 2

As the laser operates with 100% black equating to full power and white equating to no beam at all, it is generally considered that an image with correct levels of contrast at 50% opacity (on a white background) gives the best quality photographic image. However, texturally, it became clear from these tests that the lower opacity areas, despite being clearer images did not allow full exploration of the 3 dimensional qualities sought as something of a replacement for the surface plaster casts. The areas of the test where no adjustment of the image had been made had a much more

pronounced surface texture which in the case of the images of brick work and rusted metal seemed to almost move toward a 3D (or at least relief) realisation of the photographic image.

In some existing test pieces available in the CAM suite, areas of 100% black on 3.2mm MDF showed traces of total penetration by the laser, generating an almost mesh like quality. This had been a process trace that I had been quite deliberately hoping to exploit as given the intention to project on to these pieces the resulting implications for light passing through the material is clearly an area for further research. Unfortunately, there was no penetration of the board in this case. This could be due to inconsistencies in the manufacture of the material and affected by factors such as density.

Other process traces of note include the residue of dust on the surface (illustrated in Fig. 3; note the fingerprints in the dust) which lends an organic, almost velvety quality to the surface texture when allowed to remain (despite being very fragile). There may be possibilities to deliberately utilise this trace, e.g. if some areas were deliberately cleaned while others were allowed to remain dusty. The dialogue between digital and physical also continues to find sustenance in this process where the laser, despite being a primarily digital method of interacting with the surface, results in a very direct outcome, physically burning the surface of the material. The resulting texture and degradation still retains traces of the digital in the rows of dots that remain from the points of the laser (Fig. 4), yet the burnt and ashy nature of the surface is still rooted in traditional methods and techniques. This is especially recognisable by the strong smell of burning which noticeably remains on the surface for some time.
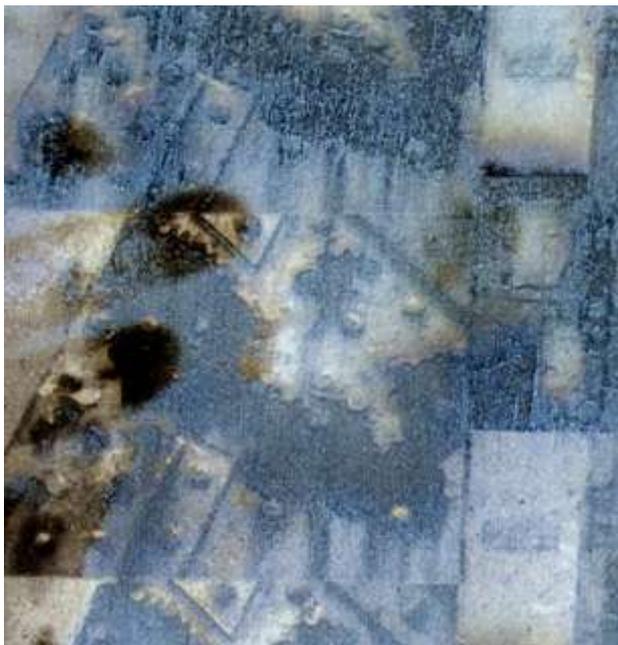
Fig. 3

Fig. 4

Slide Projection

To further explore the use of projection, transparencies have been utilised in this development work. Though these are necessarily still images, with easy access to three slide projectors it made use of multiple projectors easier and work was not restricted to the opening times of the IT Services Dept. The first challenge was finding a service provider who could 'devolve' digital images to transparency. As this is a fairly uncommon request it is also expensive and in the first instance only a few images were commissioned. Given the digital nature of the original image, I exploited this by avoiding directly photographic images and manipulated various photographic and vector sources in Photoshop to achieve a series of compositions which were clearly digital. The resulting projection does not have the same physical signature in the visible pixel like grid which covers the image yet as it is still derived from a digital process this method continues to explore a dialogue between the digital and analogue.

Fig. 5 shows the digital images produced for transferral to transparency; Fig.6 shows initial tests projecting these onto plinths.
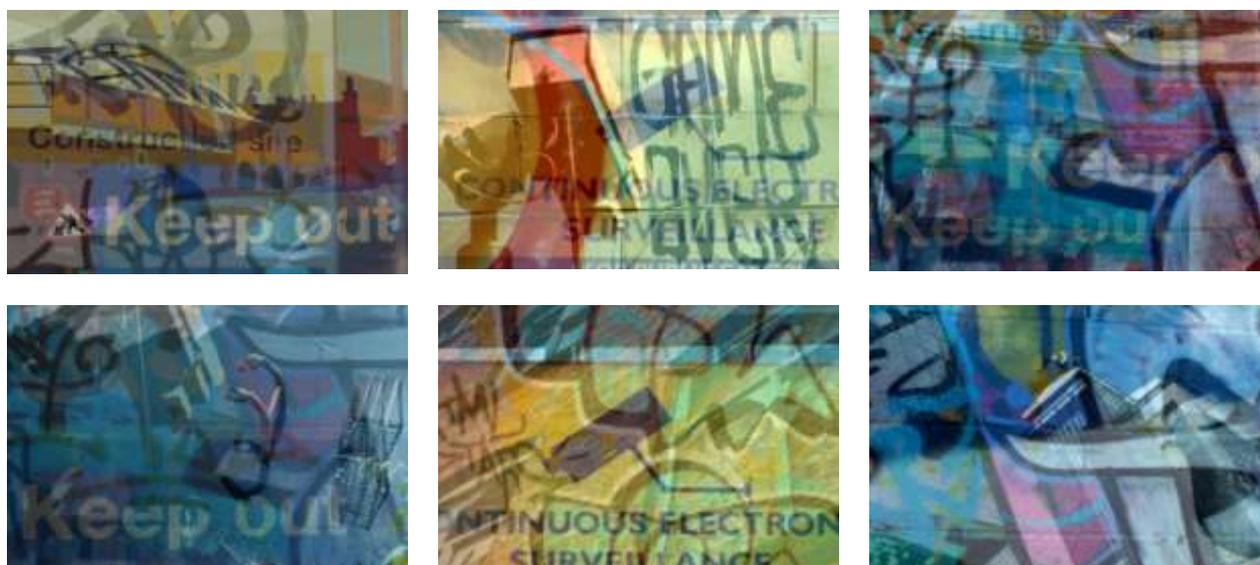
Fig. 5
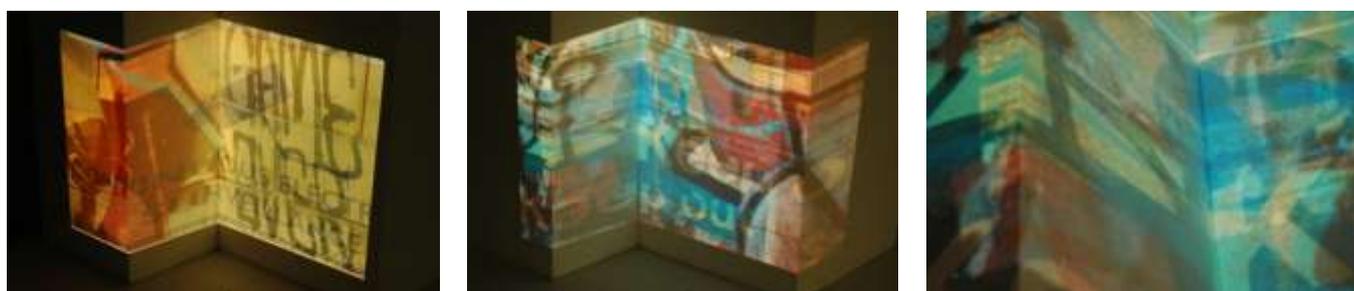
Fig. 6

Projection onto Laser Etched Surfaces

Upon achieving successful tests in both etched surface and digitally generated transparency, experiments with combining these were the next stage in realising the potential of the dual processes. With two test panels it was possible to support them at right angles to provide adjacent surfaces on which to simultaneously project different images (Figs. 7 – 9), much in the same way as the plaster casts had been utilised previously.

Main observations from these tests include:

- Projection onto more deeply etched areas appears to continue the attempts to explore space more freely. There is also a quality achieved when projecting onto subsequently more deeply shadowed areas which appears to lend a greater unity to the relationship between the projected and etched images.

- Lost movement in use of still image is noticeable.

- Lost interactivity as observed in previous developmental use of plaster remain in this instance, however there is more potential to reincorporate drawing in use of MDF as opposed to plaster.

- Still seems to be largely focused on 2D planes, further exploration of space is in need of development.

Fig. 7

Fig. 8

Fig.9

Development in Use of Moving Image

The documentation of previous tests in surface projection involved a certain amount of photographic illusion in that the objects had not been cuboid but in fact constructed of two panels propped at right angles to one another. It seemed logical in terms of development to begin working with entire objects in order to better explore the possibilities of three dimensional space. To compromise between cost efficiency and scale the object was made at 15 x 60 cm   from 3.2mm MDF. The hope was that working with the thinnest possible material would make the resulting object lighter and easier to transport to events and also result in total penetration by the laser, however this did not occur and in fact 3.2mm is not very practical in constructing objects of this nature as it is very flexible and difficult to be accurate with. This would therefore need to be reviewed in future development. Further experiments with 'double etching' in order to facilitate total but random penetration have also been delayed due to technical problems with the laser cutter.

Fig. 10

Fig. 11

Fig. 12

Fig. 13

Fig. 14

Fig. 15

The footage used in projection employed higher quality digital video (DV) processes which dramatically improved the quality of the resulting projection. Three sets of two five minute films were made in various locations around Manchester where the camera was moved to a different viewpoint from the same location. The most successful of these was the filming 'square on' of one building from two sides so the camera was moved but the same location

filmed. This did in projection generate a sense of three dimensionality in the street scene however it became rapidly apparent that this would have been far more successful if the two shots had been filmed concurrently, with two views of the same events. Unfortunately due to various time constrictions related to materials loan and facility opening times it was not possible to begin drawing on the object. Figs. 10 – 15 illustrate various moments in the projection of digital video on to the new object.

Use of slide projection was also employed in this experiment and used to 'fill in' the shadows cast by the object. This can be most clearly identified in Fig. 13. As the data projectors are much brighter than the slide projector this method brings visual features into the shadows cast without much interference to the digital projection.

Main observations from these tests include:

- Use of fully 3D object does go some way further to explore space however use of only two projections at right angles negates this somewhat. This needs development

- Use of less dense laser cutting allows projected images to be seen more clearly. Use of drawing into these spaces still needs exploring

- Use of slide projection to 'fill in' shadows cast by the object in the data projection is a successful method of incorporating old and new projection technology into the same installation whilst continuing to generate a full experience of both the immediate and the subject environment.

- Consideration of the physical construction of objects is required.

Timescale and Financial Restrictions

Due to the nature of the processes used in this development the initial timescale was exceeded and I have run into unforeseen delays from the start to the finish of this time period . With limited access to the laser cutter (the job queue can be sometimes be in excess of 5 days) which is a lengthy process by nature (each panel of the final object took up to 1 hour to etch) and my own part time access to these facilities alongside construction time the work quickly ran over schedule. Combining this with a seven day wait for the transparencies to arrive, and further delays encountered when dealing with data transferral of DV footage, it was not possible to complete any drawing on the surface of the object and the work exceeded the projected 12th February deadline. Further tests with the laser cutter have also been postponed as a consumable part of the machinery is now in need of replacing. Though in this instance it has been possible to both extend the time allotted to the work and delay certain elements, these frustrations have at least been useful in developing a more realistic idea of how long these processes can take which will be vital in the case of working to professional or events based deadlines. Financially, it has also been necessary to restrict certain elements of the work in order to not exceed my self-funded budget. If this work were to be continued outside the subsidised University facilities it would almost certainly be necessary to secure funding or sponsored access to facilities in order to continue.

Analysis of Survey Results

The revised survey was more successful than the former in achieving a higher number of respondents, despite the fact that there was no paper based version and the content was entirely web based. One method by which I attempted to secure as many responses as possible was by offering a free digital print to the first ten people to answer. I was unsure how successful this would be as I was both concerned that I had already used up a large degree of good will amongst people I know and there was no guarantee that anyone would want one of the prints I was offering, however the response was good and I was able to dispatch the ten promised prints within seven days of the survey going live, continuing then to receive a number of responses past this date. Due to the online nature of the revised survey it has been possible to record feedback from residents of a variety of cities both UK and foreign. Responses have come in from Manchester and the surrounding area, a variety of boroughs in London, Brighton, New Zealand, Stockholm and the US (including Florida, Miami and San Francisco). That it has been possible to gather such widely situated feedback is a definite benefit of web based research however it has been mostly limited to certain communities that I already have some interaction with. An alternative method of gathering this feedback might be a clipboard based approach in the street where it would be possible to ask for the thoughts of a higher percentage of strangers but this would be much more demanding on my own time.

Relationships with local areas varied; with 50% stating that they chose to live in their area to be close to family, 54% to be close to work and only 12% stating that they did not choose where they lived but had stayed where they grew up. This suggests that most of us are happy to move if necessary and that perhaps an element of choice is also an important factor in a positive relationship to our environment. 71% felt they spent a lot of time in their local area but only 41% would recommend their area to others and only 37% felt proud to live there. Of this 37%, none of the respondents were the same as those who stated they had grown up where they live, which indicates that this does not necessarily equate to a sense of civic pride. Respondents had been resident in their areas for a variety of timescales which suggests that this is not much of a factor in feeling either positively or negatively about an area.

The new findings have generally supported the previous answers relating to positive and negative factors of city living. 29% of respondents agreed at least partially that easy access to facilities, cultural events and leisure opportunities were the most positive things about living in a city, with the remaining 71% agreeing fully. 20% partially agreed that crime, litter and pollution were the most negative aspects of the same with only 4% disagreeing and the remaining 76% in agreement. The main additional negative aspect reported by the 24% not in full agreement was a lack of space and subsequent overcrowding.

79% stated that they found it easy to travel in their area and 62% specifically referred to travel and methods of moving about the city when discussing factors that affect their overall sense of being in control in the urban environment.

With respect to the theory developed in the previous body of research which questioned if positive emotions (possibly including a sense of control) are achieved through participation in environment (which might counteract the negative emotions generated by those events which specifically result in a loss of control such as crime, pollution, etc); many of the responses generally supported this.

79% of respondents felt that they had meaningful opportunities to get involved in things where they lived, with 79% of these stating that this fact changed the way they felt about living in their area for the better. 67% of respondents were able to give an example of a time they had participated in, interacted with or left a mark on their environment. Of these, 88% reported that their actions had changed the way they felt about living in their area for the better, with the remaining 12% stating that they felt the same, though these were relating to actions which in some cases were identified as being ineffective. Some comments which directly support this theory include the following:

In response to the question *'Why do you think these things (Easy access to facilities, cultural events and leisure opportunities) are often considered positive?'*

- "Being near leisure and cultural activities makes it easier for people to get involved in such activities and these activities help to build a cohesive society where barriers are broken down"

- "Because it makes a place interesting to live in, cultural events make you feel a part of your environment even if you do not proactively take part in cultural or community based projects but even as an observer."

- "they can offer paople purpose, sense of belonging and creative/physical fulfilment"

In response to the question *'Can you give an example of what makes you feel most in control when in the urban environment?'*

- "being involved, albeit in a very minor with, with local decision making at grass-roots level"

- "when I can participate in events or be part of some sort of organisation that organises events for the community."

In response to the question *'Can you give an example of what makes you feel least in control when in the urban environment?'*

- "inability to make an individual mark on anything - urban enviros are by their very nature communal and hive like..."

- When places which seemed like being a nice place to go and beneficial to the community is shut down for more commercial development or other capitalist reasons.

Selected responses to the question *'Can you give an example of a time when you interacted with, had some impact upon or left a mark on a place in which you lived?'*

- "Graffiti'd under a desk in student accommodation, may sound stupid but the feeling of permanence and partial ownership enriches the living experience, gives character to the space".

- "Yes - in our communal garden. I got involved by attending meetings to set up ground rules etc and also planted some spring bulbs in early Dec 2009."

- "i painted murals on a school wall about 6 years ago and painted huge red flowers around the door of my tower block flat that made everyone smile"

- "instigated charity projects giving free music lessons to children who benefited from them most in poorer areas"

- "There are signs and graphic input in my immediate vacinity that I designed 10 years ago. They haven't changed in that time but I designed them and they have stood the test of time. To me it means that people have 'enjoyed' my presence for over a decade without necessarily 'knowing' it... I am anonymous even before my own work"

- "I can give you examples of things I couldn't change and marks I couldn't leave" *(which is the response from the only person who stated that this changed how they felt about living there for the worse.)*

Though the above comments are in response to a variety of different questions it is important to note that they are all (with the exception of one) from different respondents which suggests that though these feelings may be drawn out by a variety of factors, there is more support to the theory than the responses to any single question might reveal.

Conclusion

a sense of making a mark in the environment either actively through direct involvement in planning and physical appearance or passively through participation in an event (arts/community based or social) will in many cases generate a sense of control which often improves the relationship of an individual with their local area. Though other factors (a notable one of which is travel) do also play a part in this complex dialogue between a city and its inhabitants, the role of the creative arts is important in generating opportunities for environmental interaction. Though there are many examples of public arts in urban environments many of these continue to be outside of this realm of interaction and it is largely in individually generated opportunities such as in graffiti or local community arts events that individuals find these moments of ownership, especially in an economic climate in which public funding for arts events and community workshops is increasingly hard to come by. That the arts and urban design can directly improve the experiences of residents not just passively though aestheticism but actively through stimulating the processes of ownership (signing a name, marking a territory) is an area which demands further attention both from this work as it currently stands and from future developments which reference this research.

Though a certain degree of permanence is often sought for in these marks, most residents value the collaboration and compromise found in a community based event and the resulting environmental palimpsest which frequently occurs. One example of this can be found at http://www.amsterdamgraffiti.com/ which records on an almost daily basis dating back to July 2007 the changing interventions on the surface of a section of wall near a skate park on Java Island just outside of Amsterdam. This 'tolerated' graffiti wall is frequently visited yet it is known that no piece of work remains for longer than a few days. That the value in participating, the intervention itself outweighs the expected longevity of the outcome is demonstrated in the constant stream of active visitors and exemplifies that the act lives longer than the mark in generating positive feelings relating to the environment. Other temporary acts such as gardening are also referenced by respondents to the survey and though these acts are also as impermanent as the plants they deal with, have clearly left participants feeling more positively about their surroundings for longer than the aesthetic value of the action remained.

It is important to keep in mind that the issues this research begins to explore are vastly more complex than any one discipline, stretching beyond even the most scientific of the creative arts into areas such as sociology and psychology. The relationships between humans and cities could easily become the basis for a body of research extending far beyond the realms of those appropriate to an MA and even these would be largely inconclusive. This research does not attempt to define or pin down facts relating to the issues addressed, rather seeks to explore and question them.

> *We shall never be able to explain or justify the town. The town is there. It's our space and we have no other. We were born in towns. We grew up in towns. It's in towns that we breathe. When we catch the train, it's to go from one town to another town. There's nothing inhuman in a town, unless it's our own inhumanity. (P.62)* Perec, G. (1974) *Species of Spaces and Other Pieces.*

The Relationship between Practice and Reflective Writing

An important element of current creative practice is a structured and relatively formal approach to reflective writing, the example of which is embodied in this document. There has always been a close relationship between the practical and the written in my practice, both in a creative and a reflective sense and prior to these studies this most recently took the form of blogging. This writing was informal and for a specific audience, however there were clear reflective elements to it and it was largely set up as a method of recording and charting progress. I also identified that the routine of fortnightly updates provided useful regular intervals at which I might temporarily disengage with making in order to assess developmental needs. In a similarly informal web-based fashion, Graphic Designer Stefan Sagmeister references the act of journal keeping on the website www.thingsihavelearnedinmylife.com, and eloquently summarises the purpose under the entry titled 'Keeping a diary supports personal development'.

Since beginning studies on the MA in September 2009, I have begun to expect evidence of a more quantifiable learning in my practice and as a teacher as well as a student I recognise the benefits in engaging all the learning domains as identified in Bloom's Taxonomy; cognitive, psychomotor and affective. The psychomotor domain is clearly addressed in making while writing responds to the cognitive domain. The affective is addressed through the ongoing reflective dialogue between thinking and making, both informally in thought at the time of construction and in a more considered fashion through the nature of reflective writing. Writing is a process by which the organic flow of thoughts may be focused and recorded in a linear fashion, be this via the simple generation of a mind map or the more extensive analysis that takes place in an extended body of writing. Tim Parsons, in his recent delivery of the context panel session, referenced the discovery that the human brain is only capable of holding up to seven thoughts in mind at any one time. Writing serves to both record thoughts that would otherwise be potentially forgotten as they 'drop off the edge' of consciousness and to provide a space in which more complex thoughts might be refined and developed. If walking is a method by which a body propels itself between points, writing is a method by which the brain moves from one thought to the next, whilst leaving itself a bread-crumb trail that the previous thoughts might be revisited. Additionally, the act of writing consolidates and clarifies whilst resulting in a trace that might then be used to communicate the outcomes to others. The process of writing is in many cases an ongoing act in which drafts are edited and refined in much the same way that the physical creative outcome is generated. The results of each can be placed before others for consideration and response and can often form the basis of a dialogue which in turn moves the work forward still further.

Proposed Development

Various potentials have presented themselves throughout this latest body of development. The most obvious 'next step' continues to be in the form of drawing on to the recently made object in the manner planned for the previous series of work. As this was not possible owing to unforeseen time constraints, it should be fairly easy to action this development and quite quickly assess the benefits of bringing drawing back into the work. As it has been identified that double projection would be more successful if two video cameras were employed to capture events simultaneously from two angles, it seems logical to include this in the same development, however, this will necessitate an additional person to monitor one of the cameras and will to some extent depend upon when this assistance might be available.

Further exploration of the potential for the laser cutter to completely penetrate the material may be worth investigating; however this would be at odds with the recognition that 6mm MDF would be more appropriate in terms of construction. It may be possible to deliberately exploit an apparently random tendency by the cutter to penetrate at certain points even with a thicker material by etching the same area twice, alternatively, deliberately cutting sections fully from the panels may also be successful. This would possibly allow certain areas of the projection to pass completely through the object, creating an alternative to a block shadow and further exploring the nature of light in passing through three dimensional space.

During the process of testing and using the laser cutter the question arose of cutting or etching into an existing drawing. This may prove an alternative way for exploring the digital/analogue, especially if this were used with images in a slide projector: an analogue drawing, scanned and laser cut/etched, which is then projected onto using an analogue process which has been facilitated digitally. How useful this may be to the overall body of work is debatable but it may at least raise new questions.

Development of the cuboid form still presents itself as a potential development area and this may be achieved either by generating an alternative shape entirely or by introducing further forms to the projected environment. The latter seems to risk falling into building architectural models; an apparent dead end to the work, however the former seems to move more towards a sculptural outcome so this area may be best left until later when a more valid reason for the development might be identified beyond 'because it's possible'.

An additional aspect of development which has been pursued alongside the practical work is that of display. It has been possible to book the space of the Chatham Link Gallery between the dates of April 12th – 19th 2010 and it is intended to use this time to generate a new installation and facilitate further exposure of the work. The work as described here and that which is to come out of the development that is to follow will essentially build toward this exhibition and it is on the aim of achieving the strongest possible show that the advancement of the work will be focused. Falling approximately 4 weeks before the Learning Record and Learning Agreement are due in this seems an important opportunity, not just in terms of professional practice and development but also for assessment and the next phase of development will be structured around these dates.

In response to the findings of the survey, part of the aim of the developed work will be to include an interactive element wherever possible. Given the limitations of the Link Gallery Space and the commitment of the gallery to the safety of its visitors, it may not be practical to devise interactive content for the show directly; however it may instead be possible to develop 'takeaway' work which might encourage people to interact with the local urban environment directly. Some plans include laser cut sections of photograph through which certain areas or landscapes might be viewed, or laser cut images through which natural light may be allowed to shine on to surfaces creating a temporary 'tag' or signature. Such an event might also encourage an element of remote interaction with the work as people could be asked to photograph their interventions and upload or email them back.

An additional opportunity to explore interactivity in the immediate future comes through an agreement to run a crafts workshop at a local community event on the 27th of March. Though this is something of an unknown quantity it may be possible to utilise this event in encouraging participants to explore some of the issues relating to public ownership in their crafts output and will, even if there is a degree of resistance to this, at least provide a useful opportunity for further reflection on the nature of community arts and public interaction.

Further development which may be explored at a later date might respond to the issue of transport as raised by the survey results in affecting attitudes towards environments and further investigation of interactive elements, including the possibility of taking the work out into the environment itself.

Summary and Conclusion

The body of developmental work completed between January 21st and February 19th 2010 (including a one week overrun) has been largely successful in determining a range of factors which contribute positively to the work. The inclusion of laser etching has proved an appropriate method of introducing surface texture to the objects, and though this offers less immediate three dimensionality, it has many more possible developmental opportunities which might be explored. That this has been used alongside the inclusion of a fully three dimensional object has not only realised full use of available dimensions but uncovered additional possibilities in referencing the qualities of both light and space. Though the use of the laser cutter is difficult to plan for time-wise it should be possible with increasing experience to utilise this facility within the time constraints of a deadline.

Use of Digital Video to improve the quality of the projected image has been beneficial to the work, especially as it was established through the trials with still images that movement is an important quality in projection onto textured surfaces. Though the use of this technology caused some delays in the first instance, as the process is now more familiar it should be possible to accurately plan for this in the future. Use of slide projection has also been successful in 'filling in' the shadows cast by the object in the data projection and when used in tandem with DV footage it has potential to continue the exploration of the dialogue between the permanent and the transitory. Practically, it is also directly useful in allowing access to additional sources of projection.

The results of the survey generally supported the theory generated during the last body of work that interaction in environment is an important aspect in generating positive relationships with urban spaces. This highlighted the need to re-integrate interactive elements to the work, possibly in the form of drawing in the immediate instance but preferably involving public interaction in the longer term. The survey also raised the issue of transport/methods of travel as being an important additional factor which affects the positivity of relationships with the environment.

The forthcoming use of the Link Gallery space (April 12th – 19th) will provide an important focus for the next phase of development, giving a specific outcome and exhibition opportunity to work towards. That this falls approximately one month before the submission of the Learning Record and Learning Agreement lends additional gravity to the event in terms of assessment opportunity. Specific factors for development to be considered in light of this include plans to:

- Explore drawing on to the surface of the objects (including possibility for laser cutting/etching existing drawings which might also be projected onto.)

- Develop use of double projection by using two video cameras to record simultaneous events from right angles.

- Continue exploration of space through tests with complete penetration of material by the laser cutter, allowing the projection to also pass through the constructed forms.

- Consider possible development of use of cuboid, either through additional objects introduced to the space or specific modifications to the form.

- Attempt to develop a 'take away' exhibition feature which could be used by visitors to the Link Gallery show to interact with the urban environment of Manchester, either to view specific areas or to temporarily 'claim' surfaces through rudimentary projection of natural light.

- The participation in a community arts workshop on March 27th which may be used to encourage exploration of public ownership issues. Though this may pose a challenge as the participants may have a very set idea of what they wish to engage with during the workshop, this in itself brings to mind an observation by George Perec which might be referenced as an admirable future aim for this body of work:

Weld the people of a street or group of streets together by something more than a mere connivance: by making demands on them, making them fight.

(P58) Perec, G. (1974) *Species of Spaces and Other Pieces.*

Work Cited

Perec, G. (1974) *Species of Spaces and Other Pieces.* Revised edition. London: Penguin