Constructing Trust in a Collaboration

The paper discusses the work of the collective Locus, which explores architecture by constructing spatial experiments in selected contexts. This is a discussion of the embrace of shared objectives leading to an absence of personal attribution and the development of an identity for the collaborative project. Locus’s interest resides in the context of spatial investigation, exploring the basic conceptions of architecture and space. The work accepts that spectators may not experience space conscious of the various spatial ideas discussed in the disciplines of art, architecture and science, however these ideas are part of the cultural context in which space is experienced. This work extends spatial speculation with an approach that is perceptual, haptic and visceral. Below is a brief description of projects completed by Locus and a discussion of the process of collaboration and the issue of trust and the negation of self in collaboration.

Keywords: collaboration, trust, methodology, reflection

# Locus

Locus is a collaboration between Michael Wenrich and Robert Mantho pursuing architecture as a site specific act in an art context, registering and interacting with the specific physical and cultural properties of a given site. The outcomes are speculative, as each project is developed in dialogue with the challenges and attributes of the site and the issues discovered during the investigation. This is a generative practice constructed through a series of projects, during which a set of architectural questions have been identified and explored. The projects aim to reveal primary architectural relationships, requiring those who experience them to engage with their assumptions and expectations of the architectural frameworks they inhabit, asking participants to question and possibly reinvent their understanding of space and form. This is a conception that extends the definition of collaboration, with the projects realization depending on the participant’s collaboration, as their individual experience is a key component of the work. Six projects have been constructed over ten years, with a working process that examines design thinking, the interaction between design solutions and construction methods and an investigation of the spatial qualities of ambiguity and indeterminacy. Most relevant to the current discussion, this practice has seen the development of a trust between the participants and techniques for building that trust when additional participants have joined individual projects.

While the subject of this discussion is trust and the manner in which individuals sacrifice their autonomy in a collective effort, it is not meant to be an academic discussion of the subject, as the author and participants are not engaged in the scholarship of collaborative practice. The research and practice of the main contributors is outside this field, but the direct experience and reflection on the process still holds value for the subject. This piece is not aimed at a critical engagement with the canon, but concerns an exploration of modes of collaboration at hand, offering a compelling reflection on collaborative methods evolved in the field. Locus was founded in an effort to explore interests and obsessions which fell outside the realm of everyday professional practice. At the inception we were two early career architects working in a traditional professional practice, with little control over the work being produced and no real outlet for creative and intellectual interests. We discussed our frustrations, not just with the obvious limitations of clients, budgets, and hierarchy, but with the inability to find ways to explore and engage ideas and making. In an effort to feed our interests we took a trip to Montreal and visited the Musée d’Art Contemporain de Montreal and the Canadian Center for Architecture. During that visit we experienced 2 installations, the names and authors of which are, through no lack of effort, lost. The first was a construct that had 2 spaces connected by a tilting walkway, which as you moved from one space to the other lowered the space you occupied. The second was an environment constructed from cardboard boxes which one entered through a small opening to crawl and climb about in. These exhibitions had a strong impact and driving back from Montreal generated a discussion about pursuing our interests through making work together, outside of architectural practice, as art. Continued discussions led to the decision to collaborate on the exploration of architectural ideas through art. With little knowledge about the culture and context of the art world and no intention of pursing the work as formal research, the objective was to explore our own thinking and to enjoy making in a direct way again. This was a reaction to the constraints of working in front of computers hour after hour on projects with very carefully proscribed design boundaries and very limited agency in the process. Along with the determination to explore ideas, a decision was made to produce work that resulted in material construction, as there was a strong desire for physical interaction to be a primary means of investigation. These conversations regarding approach and the topics to be investigated developed a shared agenda and clearly established the first basis for trust. The context for the work was very limited; we were focused on making things that we thought would help us find out how our ideas about space and experience could be made and what the possibilities and limits to our thinking were. The goal was not academic or even to attempt a disciplined investigation, it was expression pursued for pleasure. Our influences were limited to artists and architects we knew about, Gordon Matta-Clark, James Turell, Robert Irwin, John Hejduk and Diller and Scafidio and our own experiences of making environmental constructions in architecture school. Consequently, there was no specific research into other people practicing this way or into collaboration as a concept; it was a direct effort to explore through making. The only direct reference studied was the GucklHupf project in Austria.

This project, by Hans Peter Wörndl, became a reference for experimentation and the use of simple architectural form to explore fundamental architectural ideas. The projects capacity to offer rich spatial conditions and formal variety was an inspiring example of what could be achieved. Cognizant that the project would be self-funded and that any construction would have to be achievable with 2 people, the GucklHupf underlined the possibility of simplicity and focused intention.

As two professionals involved in the day to day team work required to deliver architectural projects, collaboration and trust were not alien concepts; however the circumstance of partnership in a project where financial and personal sacrifices are being made is significantly different. Professional trust can be difficult to establish and is necessarily transactional, collaborative trust in a situation of creative investment is both critical and harder to accomplish. In the initial stages of the partnership, excitement and inspiration helped bridge differences of conception and approach. The results of the joint efforts and the success of the outcomes in fulfilling the aspirations of each participant became an important foundation for building trust. As the collaboration developed, increased commitment demanded greater levels of trust. Projects grew in scale, had larger budgets, involved institutions, external funding and other participants, which resulted in careful consideration of the processes undertaken in the collaboration. Eventually, this led to an explicit consideration of the necessary requirements for the successful completion of these collaborative projects, which will be discussed below. This analysis of the early projects resulted in an explicit understanding of the key forms of communication and the central role trust played in ensuring successful outcomes. Ultimately a set of workshop strategies and techniques for building trust when working with groups were produced. The workshop activities will be described to illustrate how the insights gained were utilised. Below are short descriptions of the projects produced by Locus for reference in the reflective discussion outlining the stages of generating an understanding of trust and ways to build it when working in cooperative ways.

# Reflection on Trust in Locus

The first project completed by Locus, ‘Hurricane Ridge’, resulted from a series of compelling discussions and drawing explorations, which explored the shared architectural conceptions of each partner, which also demonstrated the way individual contributions, could be augmented or used to leverage the development of the collective thinking. **Fig. 1** For example, Robert Mantho’s personal interest in the mutability of space spurred a discussion of operability, while Michael Wenrich’s experience with fabrication drove the exploration of detailing with dimensional lumber. While the interest in similar architectural themes was important to the initial efforts, it quickly became evident that the cooperative outcomes were markedly different than the results either individual would produce separately. It was only through discussion that the central theme, the position of the human body in space, was identified. The working through of concepts and the following lines of thought through drawings and models turned the dialogue into single, shared investigation. **Fig. 2** Unlike working in professional practice, where power and agency reside primarily in the person with seniority and higher position in an office hierarchy, the work of Locus is between two equal parties, with the express desire of finding ways to develop projects collaboratively.

Locus began with the objective of working together, not in the pursuit of one participant’s ideas in the first project, to be followed by the pursuit of the partners in the following project; but with the goal to explore architecture together in a collective effort. This equal balance of power was implicit in the dialogue undertaken by Locus and became a point of consideration in thinking about the way to maintain equality when working with others. It also became clear that new ideas were emerging from the interaction and understandings across a range of issues, with topics and interests specific to the work of Locus emerging. An illustration of this is the way that design discussions for the Hurricane Ridge project led to the exploration of perception and haptic experience, which were not explicit aspects of the individual participant’s prior work. Concern with colour, body sense, direct experience and participation, became important considerations for Locus projects, leading to particular design explorations in subsequent projects. These issues also became part of the textual investigation undertaken by Locus, becoming explicit goals detailed in exhibition proposals and reflective writing following the completion of projects.

Reflecting on the design process reveals some key themes: respect, listening, curiosity and enthusiasm. While it seems obvious and straightforward that respect is an essential ingredient to all interactions, in relation to collaboration respect is central, as trust flows directly from mutual respect. Respect in the context of professional practice is characterised by a need for a due regard for the people you are working with, if for no other reason than to avoid conflict and reduced effectiveness. When collaborating in the production of a proposal that is authored collectively, it is necessary for respect to operate on a different level. Instead of simple mutual regard, an appreciation for your collaborator’s intellect and creativity and a belief that their opinions and design approaches are central to the animation of collaboration is necessary. What became clear in talking about working together and in preparation for working with larger groups was that respecting every contribution in a discussion is critical to the building of the trust that collective working is founded on. This allows for the free exchange of ideas and the assembly of numerous options, from which themes and directions can emerge and allows all participants to believe that their contributions are being valued. Examining the working process determined that there was a period of interaction, where ideas and propositions came rapidly and had very loose boundaries. Further reflection revealed that trust was dependent on understanding the importance of communicating confidence and interest in all contributions to establishing an environment of respect. This led to the technique of meeting each input with encouragement and extension, taking the line of thought at least few steps further and reserving judgement, before moving onto another suggestion. At first this happened organically, but in considering how to work with larger groups it became, if not a formalised technique, at least a deliberate attitude to communication.

The ability to listen with openness follows on naturally from the discussion of respect, as listening plays a major role in establishing respectful atmosphere. One of the key faculties developed in architectural education is the critical apprehension of design proposals. This is a valuable skill and essential in the refinement and development of solutions in a design context, with each individual practitioner finding their own approach to the critique of solutions. However, the natural give and take of collaboration can be damaged if critical assessment immediately follows a proposal. Developing the ability to both reserve judgement and the urge to find the next answer or counter to a proposal is an equally vital skill in collaboration. It is important to take the time to consider each verbal or visual contribution, without judgement, to build a full understanding, without attempting to assemble a response. There was a realization that trust can be eroded if a critical comment is the first response to a new contribution. Again, in the context of the early partnership this happened naturally, but when an interest in working with others developed, the examination of the process exposed that each participant was suspending critical evaluation and engaged in deliberate listening. Further conversation led to a realisation that this type of listening facilitated interchange, opening up discussions, generating possibilities and importantly fostering a trust in the process. It became a tool to be used in the inevitable moments of difficulties that arise when agreement has to be constructed from oppositional positions and subsequently a technique to be used in leading group discussions.

Another important characteristic required for successful collaboration is a curiosity for the way someone else thinks. In the initial stage of working together the shared understandings and interests are what feed the interactions, but as more work is produced the differences and the complimentary qualities become compelling. Finding out how your collaborator builds an argument, analyses information or a specific problem, and the way this can expand understanding and enhance personal knowledge is intriguing. Being curious about how different ideas relate to each other, how various choices lead to distinct outcomes, allows solutions to be assembled collectively that are greater than the sum of their parts. Curiosity fosters a process of discovery and lifts the investigation out of purely instrumental decision making, opening up areas of exploration and permitting enquiries that may not have immediate payoffs. Obviously, not every stage of a collaboration can engage in lengthy curious speculation, as production requires the timely completion of tasks, but even during periods of intense activity, a curious approach can provide useful information to be used at a later date. For example, when on a ladder attempting to locate a panel in relation to a wall element, it is useful to try multiple positions, even if the initial position is used, as the spatial characteristics and formal properties of the various spacing can be called upon in future work. Maintaining a curios attitude is an important challenge but central to sustaining a rewarding working process. “Why? Tell me more. What would happen? What if?” Are only a few of the curious responses that can start a fruitful new line of inquiry. Keeping curiosity at the heart of a collaboration is essential.

Probably the most important attitude to preserve in the process of working is the enthusiasm which gave rise to the collaboration, an enthusiasm for exchanging and finding solutions with others. Enthusiasm provides the necessary energy to pursue the work in the face of practicalities, financial limits, time pressures and other obstacles that occur during the course of producing any proposal. Explicitly expressing the underlying interest and benefits to working collectively is necessary, as participants need to feel confident that the process is succeeding. Regular recognition of the results generated by the collaboration and the strength of the shared undertaking helps focus and sustains the effort. Demonstrating enthusiasm for your partners contributions also generates the trust necessary for the risk involved in expressing opinions and proposing solutions. Outward communication of the pleasure and excitement of interacting and pursuing outcomes together fuels the exchange of ideas that collaboration is founded on.

The belief created during the design process for Hurricane Ridge, as well as the understanding developed were essential to the successful completion of the construction phase. The remote site of the project created significant challenges for logistics, complex construction problems and strenuous physical effort, which resulted in numerous stressful events. The negotiation of problems in such circumstances is both reliant on and contributes to the building of, a robust trust between partners. Carrying large pieces of timber through the woods, up steep hills, requires commitment and demonstrates a depth of engagement in the shared endeavour. Demanding physical labour and long hours spent together to solve problems transforms communication and establishes mutual respect. The intensity of the experience helped to form a strong bond and augmented the creative and intellectual trust developed during the design stage. The sharing of strenuous effort and the reliance on each other to achieve a single goal furthered one of the critical components of building trust, the surrendering of individual authorship for a collective objective – a construction with joint ownership. It is the realization that the successful result of all the discussions, drawing, sweat and hard work is the consequence of a collaborative judgment, which would not exist with distinctions regarding authorship. The issue of authorship was not discussed openly during the design process, with both partners maintaining openness without the need for explicit discussion. What was obvious was that a desire to see what could happen when ideas were combined or built upon through collective pushing and pulling required a surrendering of authorship. This surrender ran counter to much of the culture of architecture, where a students and professionals individual creativity is privileged and the uniqueness of an individual’s visual language is encouraged. In the traditional professional practice model most outcomes are the result of hard work by a team of people, but the collaborative nature of this process is subordinate to the hierarchical management structure, with authorship perceived to reside with those at the top of the structure. While architects working on design teams do have agency and do “author” many aspects of proposals, it is very common for there to be a feeling of “working for” the office, with the lead designers and named partners having the creative freedom of authors. The process of designing and building Hurricane Ridge was distinctly different to both of these situations, without the intensely personal focus of work done in architectural school or pooling of effort for instrumental purposes in the office situation.

Within Locus each partner used the exchange of ideas to build the line of inquiry, with the equality between the participants stimulating contributions. These discussions took place in a manner completely different to design discussions both members experienced in professional practice, where the power inherent in a hierarchical structure plays out in decision making. In both cases, the collaboration and practice, the individual is distanced from a traditional conception of authorship. However, the condition of parity and the intentional relinquishing of individual authorship in collaboration leads to a very different condition. The collective of “we” minimises attachment and defensiveness and fosters a belief that concepts are pursued because of their merit, rather than because of the position of the contributor in the organisational structure. Collaborators have a definite sense of ownership and authorship, but with the difference that individual ego is reduced. This diminishing of self is both the key to a successful interaction and a significant part of the pleasure in working together. Sharing responsibility and building solutions with alternatives to a well-developed personal line of thinking, opens up possibilities and surprises that are very interesting. Co-authorship also has the strength of multiple voices and benefits from being subjected to a critical dialogue, with the potential for more robust outcomes.

Trust in the collaborative process is a major factor, with both parties equally invested and satisfied, in the success of jointly produced work. Participants need to understand and have confidence that their sacrifice of individual recognition will result in strong outcomes. When this is achieved and this trust is rewarded, it is more likely that trust can be increased and sustained. The members of Locus did not have a context of collaborative art practice to draw on at the time, the way of working was not in comparison with others working in a similar mode, but in relation to the standard practices of traditional architectural offices. Lengthy discussions, analysis from different perspectives, reviewing multiple options, referencing visual arts, as opposed to the instrumental and focused approach of the building delivery process; this was the context for the work of Locus. The success of the ‘Hurricane Ridge’ project and the satisfaction that came from a strong sense of accomplishment were critical to the continuation of Locus and the trust and belief in the work that resulted provided the foundation for the future collaboration.

# Challenge to Maintain Trust in Locus

The relocation of Robert Mantho to Glasgow required a change in the working practices of Locus. All subsequent projects required long distance communication, remote collaboration, careful planning and highly effective production when on site. The next project, ‘Making Space’, built on the communication and understandings developed in the ‘Hurricane Ridge’ project and established the working processes for discussing and designing in separate locations. **Fig. 3** Relevant to this examination are the division of tasks, the strategies for digital design exchange, advanced logistical planning and tight scheduling during the installation period. All of this effort relied on a faith in the abilities of each participant and a belief that goals would be achieved and problems solved. The success of the project created a deepening of trust, an interest in exploring the nature of collaboration and the intention to extend the work by involving other contributors. There was an interest in examining how strategies and techniques developed through the analysis of the previous collaborative experience could be used to forge cooperation in a larger team, from potentially varied disciplines. Could we achieve the free exchange and the willingness to sacrifice that was pivotal in the work of Locus with others? It was at this time that the reflection mentioned previously took place and a set of ideas for developing a working process took place. Observation revealed that the process began with a set of questions and that the responses to these questions were deliberately varied, with open and extended thinking being the implicit strategy. This resulted in the decision to make this approach explicit, with organised activities and investigations with these strategic goals in mind. While the collaborative techniques used, (word lists, shared drawings, sketch models) were typical of joint design and developed casually, it was decided that larger groups would require structured activities that generated direct shared outcomes. In an effort to explore these issues a project was planned with an expanded team and carefully constructed working process.

The project ‘Constructing Complex Space’was designed with shared goals of exploring collaboration as a methodology, as well as the spatial themes of interest to Locus. Of particular interest was attempting to see if direct interaction with material construction would impact spatial perception. **Fig. 4** Examining the attributes of collaboration to determine the characteristics of the practice provided a set of guiding principles for a method of working which offered the possibility of capitalising on the previous work and expanding the group of participants. Over a period of months a process of evaluation and reflection helped make explicit the specifics of shared decision making and insights regarding the production of joint conclusions.

Details of the activities that occur at different stages of the process were articulated, with particular attention paid to the way selections were made and directions determined. Consideration of how investigation took place and how key interests were developed from the analysis of the visual material, generated important concepts for transferring the working processes. Most critically, shared judgment in verbal and visual exchange activity was scrutinized to clarify behaviour and practices that built trust and supported mutual commitment and would foster the surrender the individual ownership of contributions. **Fig. 5** While the analysis below articulates both the process and the key mechanisms utilised, Fig. 5 illustrates the visual dialogue that takes place through sketches. Both participants are drawing on the same piece of paper, sometimes on the same drawing; the result is a visual debate. This demonstrates the guiding principle of the method – structured open exchange, each participant contributing in a directed dialogue.

This reflection resulted in the determination a method of working. This method was not derived from research into collaborative practice and while systematic it did not operate with reference to other practices. This is due to the objectives and goals of the participants, at the time primarily engaged in other areas of interest and viewing the work of Locus as a way of exploring creative ideas, not as a focus of research. The principles and practices described below were the result of discussions not connected to a research context, but to a context of direct exploration. When Locus began working there was no understanding that collaborative practice was emerging as a major theme in art practice and only after years of work was this recognised. The current text posits that reflection without reference to the academic examination of collaboration has value; in that direct reflection could reveal first principles.

The method articulated following reflection was founded on the key tenet of open exchange with no initial boundaries or editing, to be followed by the establishment of principles derived from the discussion. The rough text diagram below illustrates the process. **Fig. 6** The key to this methodology is an intentional effort to open all discussions, to collect the results and to ensure that all contributions are considered, with every decision being provisional until a robust consensus is established. This requires explicit mechanisms which are structured to elicit response from participants, record these, evaluate for overlaps, similarities and differences and ultimately distil agreement. When this process is open, systematic and deliberate, confidence and trust is built. As the diagram illustrates the process is iterative, reflective and disciplined. Each step relies on a participatory ethos, which builds trust through the collective generation of results. Results are evaluated with concrete criteria that have evolved out of reflective discussions. Participants work through a process that is communicated to them at the start and referenced during the work. The main tenants of the method are clearly stated – openness, reflection, contribution, respect, trust and consensus – with a clear articulation of the goals and benefits that result from its use. Each stage of the diagram can be explained and the linkages between each and the whole methodology establish the logic for the process. For example, the stage Re-opening with Criteria can be described as the re-opening and extension of the discussion, with the express purpose of finding new directions that explore possibilities that are distinct from those examined previously. The results of this speculation are reviewed using the criteria and the framing developed in the previous step, to evaluate the possibilities, overlaps and potential strengths of expanded thinking. The careful explanation of the methodology builds an understanding of the primary goal of the systematic process – trust.

Working with the full knowledge that the work is being pursued through a structured method provides assurance that results will be collective and the consequence of everyone’s contributions.

Constructing Complex Space was the first attempt by Locus to put the results of the above reflection into practice. Locus designed a workshop that capitalized on the review of the previous collective effort, with specific exercises constructed to build trust, cooperation and commitment to collective outputs. Locus also hoped to discover if the workshop’s examination of spatial concepts resulted in changes to the spatial perceptions of participants. These key objectives of the workshop were the result of the reflection detailed above, which was undertaken by Locus to derive a clear understanding of both the consequences and the future goals of the collaboration.

The participants were Locus and a group of students at the Glasgow School of Art, with the following makeup of disciplines: three second year architecture students, two fourth year architecture students, one product design engineering student and two sculpture and environmental art students. The workshop began with information gathering and site research activities that required participants to work together in pairs, in small groups and as a whole. **Fig. 7** Guidance through structured discussions and direct feedback helped to create an ethos of exchange, with individual members contributing throughout. After this information gathering and discussion, new partnerships were established to explore issues identified in the group feedback sessions. The results of these refined research endeavours were reviewed collectively to define the central themes to be investigated in a set of design tasks.

**Fig. 8** Again, participants were organized in groups of various sizes to carry out the work, with the changes in group composition to encourage interaction between all those involved.

This work took place with a deliberate attention paid to the role of each participant, with the workshop leaders engaging in the tasks as equals, allowing and encouraging everyone to assert themselves and advocate for particular viewpoints. The short duration of the project allowed expediency to be used to generate a quick pace, with speed helping to breakdown concerns regarding the value of specific contributions. By rapidly producing a large volume of responses and given each equal weight in group exchanges, the whole group became invested in the collective outcome and the attachment to personal inputs was minimized. In collaboration, particularly if participants are new to this type of practice, one of the most significant barriers is breaking down an individual sense of ownership, generating an atmosphere in which specific ideas are less important than the collective result that develops through conversation. It is critical that each participant puts aside personal authorship and invests in the shared authorship of the group. Understanding the importance of this key idea came directly from the previous experience of the Locus partners, which led to the development of tactics for encouraging this shift when working with groups. The workshop began with a series of quick exercises; creating a large set of possibilities helps to reduce proprietary feelings and cultivates enthusiasm for a collective result. Central to this was a deliberate effort by Locus not to drive the discussion in particular directions, or to assume a position of power, but to facilitate discussion and the opening of fields of speculation. While certain choices were clearly identified with specific individuals, the mixing of activities and participants led to joint ownership of the resulting outcomes. In the end, ownership resides in the group proposal, not in specific elements of the collective results. The five days spent determining the collective design to be constructed for the exhibition, helped the whole group build the necessary trust to accomplish the final outcome. Again, the intensity of the experience created a unique atmosphere, both demanding and pleasurable. Focused and difficult, the group overcame difficulties and learned to rely on each other to achieve goals. The final outcome had a strong experiential impact and at the opening event engaged audiences of various ages and interests, with children using it as a playground in the early evening and later as a dance floor by students and guests.

Following the completion of the project participants were sent an e-mail with the following questions:

* What aspects of the site analysis did you find valuable?
* What are your thoughts about the collective design discussions?
* What are your thoughts about working in a collaborative manner?
* What are your thoughts about the project as a built experience? Describe the project as best you can and include any thoughts or comments you heard from others.
* What is your current thinking about “complex space”? Describe the space in the project.
* Describe your understanding of the role that physical experience (“hands on”) played in your perception of space in the project, both during construction and in the finished work.

These questions were aimed at finding out how the participants viewed the processes and exercises of the workshop, but consistent with the earlier focus of Locus’ work, there was a strong interest in discovering the impact the experience might have on the spatial perception of the participants. Reflecting on the contents of the questionnaire suggests that this dual focus is evidence of a naïve understanding. The construction of effective questionnaires is very difficult, with the clarity of objectives and the careful definition of the boundaries for the enquiry being essential. The consequences of this process are more accurately defined as structured interviews, as the questions are open-ended and provide fundamentally anecdotal information. The level of response also limits the value of this questioning, as only four participants responded. Again, a more considered and knowledgeable approach would have been beneficial, with the interviews taking place in a manner that ensured a higher rate of response.

The answers received all mentioned the value of the site research exercises, that they enjoyed collaborating, that the structured discussions were effective at producing shared objectives and answered the last four questions (which asked for descriptions of space and experience) in roughly similar ways; referring predominately to the material facts of the final project. One respondent felt that the design discussions, while open and mostly successful at achieving free exchange, were occasionally dominated by more vocal members. The responses did not provide information regarding changes in spatial perception due to the discussions or the direct experience of construction. All four of the students who answered the questions did say that they enjoyed the process and that they had learnt valuable things, such as new techniques for analysing a site or construction skills. Another common comment referred to the benefits of working at 1:1 scale, allowing abstract ideas to have a concrete impact.

The language and manner of presenting the questions was aimed at facilitating frank and unselfconscious responses. It was thought that asking people open questions and asking for responses via e-mail would provide time for reflection and allow people to speak freely. It was clear from the response that the language of the questions was not precise enough, as many responses did not address the intended topics of the questions. The language is very open ended and somewhat vague, with phrasing that encourages general responses, e.g. “What are your thoughts …” This lack of rigour encourages less disciplined responses, providing interesting, but ultimately off topic answers. While one participant was a member of the GSA faculty, none of the students were under direct supervision, as the architecture students had progressed into other academic years and the other students were from different departments. This coupled with the careful facilitation of the structured exchange exercises and respectful communication during construction, suggests that the “power” of the workshop leaders did not inhibit open responses. Age differences, professional status and level of experience certainly impact perceptions of power, but deliberate and intentional emphasis of the non-hierarchical nature of collaborative working practices, can be assumed to have had a mitigating influence. While the issue of power is not the central theme of this discussion, ultimately a careful understanding of how respect, listening and enthusiasm are used to build trust was important to dispelling traditional power relationships to allow all participants to feel equal members of the collective effort.

While the results of the interviews were somewhat limited, it was clear that the workshop exercises had largely achieved the goal of creating a collective authorship, with many comments supporting the notion that being asked to cycle through many options and to critically evaluate them as a group had allowed people to surrender their attachments to particular solutions. By the time construction began all members of the group were committed to the group’s decisions and able to pursue the collective objectives, to point of being able to resolve design problems that arose with the shared language and understanding that they had built together in the workshop stage. For Locus this project succeeded in expanding the understanding of collaborative practice and as discussed in detail previously, resulted in the development of a methodology for generating collective design objectives and building trust. There was an added benefit in that the initial reflection and discussion to design the workshop coupled with the examination of the process following the exhibition, resulted in an explicit articulation of previously tacit knowledge. This new knowledge has had a direct impact on the continued work of Locus.

The two projects which followed ‘Constructing Complex Space’, ‘Taking Place’ and ‘Changing Place’ utilized many of the lessons learned regarding collaboration, to facilitate the development of solutions and successful outcomes in the context of less time available and increased ambitions. **Fig. 9 & Fig. 10** The use of the workshop technique of gathering research and reference materials to help generate numerous solutions which are each iterated quickly was used to provide a foundation for more detailed discussions.

Prior to ‘Constructing Complex Space’, the development of a solution centered on one line of enquiry that emerged early in the discussions. In ‘Taking Place’ multiple directions were developed simultaneously via e-mail exchange until arriving at the site, where these directions were tested and revised until a single solution was selected for development and installation. The value of this methodology was immediately apparent, as both the freedom of response and the dialogue with the site generated a project with attributes that were carefully calibrated to provoke strong haptic and visual consequences in a distinctly ordinary space. Playing with multiple approaches without a sense of investment helped to reveal the singular characteristics of the site and in the development of a response that had measurable impacts on perception and experience. The tactics first designed for the ‘Constructing Complex Space’ workshops helped to produce a challenging and compelling result in a very short period of time. These lessons from ‘Taking Place’ were used in a different way in the project that followed.

Over ten years and multiple projects Locus has developed a strong collaborative process, with working methods that allow a rapid engagement with diverse site conditions and a range of complex architectural concepts. Throughout the collaboration, creativity was developed and explored, as well as strategies and techniques for generating trust and communication over a range of cooperative undertakings. Significant for this discussion was the way that the reflection on how collaboration worked, how communication was encouraged and most importantly what specific tactics could be used to build trust, helped to generate a methodology for collaboration. Throughout the work, Locus discovered repeatedly that the space of collaboration was unique – with the diminishment of concerns about authorship, open modes of communication and most critically the power of trust – providing a model of practice that produced distinct results. The excitement of constructing a proposal with collective authorship and realising the value in surrendering the focus on individual attribution was both an interesting insight into creative processes and a compelling lesson for personal growth. Moving from an ego driven desire to express a personal vision to an interest in finding new possibilities through a discursive process was a departure from traditional notions of authorship. The relation each contributor has to collective work altered the conception of authorship, placing the value on achieving the goals of the work rather than individual recognition. Seeing the strength of shared effort and the value of the results of this effort altered the approach and practice for Locus across the range of professional and private activity. Understanding the significance of communication in design, how subtle differences in tone and the careful deployment of tactics to facilitate exchange can change how contributions and participation occur, was very valuable. This Special Issue of Architecture and Culture Journal emphasizes the role of process and communication in architectural practice and production. This examination into the work of Locus demonstrates the validity of this focus, by showing that the analysis of initially organic interactions revealed a potential methodology for guiding a design process driven by constructed communication. Again, this article is not focused on developing this insight, but the connections of the central theme of trust to this observation are obvious. The focus of this reflection, like all previous reflections, has pointed out the central role that trust plays in maintaining effective communication and the robustness of collaborative work. Locus constructed explicit strategies for demonstrating how participants are trusted in the design process, through active making and respectful exchange to generate trust in the process and in fellow collaborators. These strategies and the methodology outlined above may provide useful tools for the consideration of design processes. Articulating how trust can be built and the importance that it plays in a collective design effort can add to the understanding of design exchange and could help in illustrate how the critical assessment of design processes can lead to knowledge that can improve communication and hopefully the results.

Figure 1. Hurricane Ridge - Hurricane Ridge was constructed on a steep wooded site, as an investigation into how spatial perception was influenced by body position. The primary positions; sitting, standing and lying down, have an individual location in the structure, providing a unique relationship with the topography and the space in which it is situated. Photo by Michael Jermyn

Figure 2. Early sketches. Photo by Robert Mantho

Figure 3. ‘Making Space’ - ‘Making Space’ was an installation responding to an existing gallery space that explored the ambiguous spatial conditions generated by color fields and finely defined planes and the impact on the perception and ‘reading’ of space. In a 26’ square volume, a grid of strings with a 6” spacing, were suspended from the ceiling to form a series of planes delineating a series of spaces. Photo by Michael Wenrich

Figure 4. ‘Constructing Complex Space’ - “Constructing Complex Space” was conceived as an architectural promenade, the project was comprised of a plane of fabric wrapping and folding around the existing structure and a constructed wall and platform. The fabric plane registered, defined, contained, and extended space to interact with the exiting building and introduced structures. Photo by Kyla Bruce

Figure 5. Design Dialogue. Photo by Michael Wenrich

Figure 6. Methodology Diagram.

Figure 7. Site Analysis. Photo by Michael Wenrich

Figure 8. Design Exchange. Photo by Michael Wenrich

Figure 9. ‘Taking Place’ - ‘Taking Place’ examined existing conditions to develop a discussion about the malleability of spatial definition. Constrained in a tight horizontal slab of space six existing moveable millwork walls, designed to host exhibition information, were used to exploit their thickness and illuminated quality to make edges and boundaries that had depth and variability. Photo by Michael Wenrich

Figure 10. ‘Changing Place’ - ‘Changing Place’ was a constructed in a gallery space and explored the manipulation of space with line and the changing slope of the ground plane, examining how this fluctuation of space influenced a participant’s perception and experience of space. In two rooms, roughly 24’ square, groupings of vinyl coated wires strung between a lighting grid and the varied floor surface to form a complex network of spaces, readings and forms. Photo by Michael Wenrich