We attempt to describe the dynamic character of the relationship between client and architect as it changes over the course of the design process involved in building a building. The nature of the client architect relationship, and specifically the level of trust between client and architect, is critical to the success of the design process, and making the dynamic character of this relationship explicit to both client and architect could enhance the outcomes possible.

**Introduction**

Architecture, particularly in practice, is driven by a patron or client, someone to commission the design. Sometimes this client is imagined, but design, as distinct from art, rarely exists without an end user in mind. The designer is in a relationship with the client, for better or worse, and this relationship, like all relationships, is dynamic, changing over the course of the relationship (the design process) in reaction both to events internal and external to that relationship.

While there are other relationships within the design process (in the architect’s case, the relationship with the builder, or the engineer, for example) the relationship that drives the process is that between architect and client. For the purpose of this research, we considered this relationship in terms of the level of trust that exists between client and architect.

We attempt to describe below the dynamic nature of that relationship over the course of the design process which is the building of a building, but we believe that the discussion below could be mapped onto other design processes and we hope that some of the lessons learnt are applicable across design disciplines.

The specific architect client relationship has been explored previously. Nourizi et al. (2015) describe the difficulties experienced in effective communication between the architect and client, particularly given the technical complexity of making buildings. The RIBA Working With Architects Survey (2016) likewise identifies effective communication as the key area that architects need to cultivate. The RIBA survey is ongoing research and thus tracks changes in client attitudes, and it certainly seems that communication issues are increasingly important in maintaining the client architect relationship, particularly given the ever increasing complexity in the building procurement process.

The research in the main explores communication and in particular, the relationship is described in terms of the client gradually learning about the architectural communication, and how improving communication and thus the relationship, as described, for example, by Siva and London (2011). The RIBA surveys also highlight this aspect of the relationship. We have chosen not to focus on the nature of the communication (or miscommunication), but to take a step back and try to gauge the character of the relationship itself, ex-pressed in terms of trust between architect and client and how it changes over time. We have synthesised a number of individual design processes from our own practices to generate a more universal understanding. This reveals that the relationship during the design process is not a linear one, but fluctuates over time. We believe that managing expectations of both client and architect about the process itself is critical in achieving more fruitful communication and that an insight into the knowledge that the relationship does not chart an even course will improve the relationship. Toward this end, we attempt below to develop a graphic tool to map this process, to capture and describe its turbulent nature in the most easily comprehended fashion. We believe that these fluctuations can be anticipated, and through this identification in advance of
trust bottlenecks, the relationship can be maintained in a relatively healthy state.

Parameters of the drawing - the X and Y axes

The drawing itself is a simple graph, with an X and Y axis. The X (horizontal) axis measures the passage of time. The RIAI (Royal Institute of Architects of Ireland) provides a framework for this in their document Working with an Architect (2017), in that the stages of the design process are described from 1 to 8 - mapping the process to this framework allowed us to cross reference a number of different projects. We have amalgamated the stages 5 and 6 described by the RIAI into a single stage, as this maps more closely to our data. Architects very much consider the building of the building as part of the design process, given that many design decisions are made while the building is on site.

The Y axis hopes to describe trust between architect and client. The purpose of this re-search in not to establish absolute measures of the levels of trust between architect and client, rather it seeks to identify how levels of trust vary at different times during the process. Much research has been done exploring the nature of trust in relationships, such as between doctor and patient in granular detail, broken down into individual encounters (Cook et al., 2004) but as described above, the ambition here is to understand the dynamic nature more so than the absolute level of trust. There is also much discussion about the merit of attempting to objectively measure trust, as by Lewicki and Brinsfiel in their chapter in the Handbook of Research Methods in Trust, and the inherent difficulties in this process.

For this reason, the scale on the Y axis describes relative values, better or worse rather than absolute units.

Sources

The primary sources for the information which generates the drawing were taken from a number of projects within our architectural practices. The research relies on interviews with a number of the clients, using a questionnaire, and a review of the correspondence specific to each project. It is worth noting that the authors have been in practice for approximately 20 years, with the first five years employed in mid-sized practices (15 - 20 architect offices) and the remaining 15 years as principals in small practices (1 - 5 architects) engaged in primarily small projects (budgets less than €500,000). The research presented reflects this practice. The cohort of clients are therefore generally closely and very personally involved in the process and the process would be the clients' first experience of a design process. It is acknowledged that the research is not reflective of clients that have repeated experience of procuring buildings or buildings with larger budgets.

The issuing of invoices provide an accurate measure of the passage of each stage, as in-voices are issued upon the completion of each stage. Correspondence (email in the main) was used to cross check if this method of tracking time was accurate.

Description of the stages and the corresponding level of trust

Stage 1 - Survey and development of the brief
This stage involves the client and architect developing a description of the final building, in terms of rooms, as well as
look and feel, very much the sunlight uplands of the design process. All things seem possible at this stage, whatever can be imagined can be built. Re-viewing the email correspondence from this stage, the communication involves images sent by both architect and client taken from the best exemplars of the typology which is being designed. This is particularly true for domestic clients, where images from sources such as Pinterest are frequently exchanged. The trajectory of the trust relationship is very much upwards.

Stage 2 - Outline design
At this stage, the architect presents drawings and models of a design, with a general sense of what the detail design should be, but many specific details are still fluid. At this stage reality begins to impinge on the ambitions of the architect and client, such as the physical context of the site, the social context of the site (neighbours!), and the vague idea that the ambition of the client and architect might not be supported by available budget. The level of trust may wobble as the architect occasionally challenges what is possible given the constraints which become more apparent at this stage, so the trajectory wobbles somewhat, but trust levels remain high.

Stage 3 - Detail design and cost control
The project becomes more specific at this stage, typically the architect produces dimensioned and labelled drawings. As the possibilities for what can be achieved narrow (cost and practicality being the major limiting factors), there is increased turbulence, with sudden dips and peaks in trust, as the client begins to suspect the architect may not be in full control of the process, or the budget at least, but then trust levels rise as the architect displays ingenuity and skill to resolve these issues as they arise. As well as this, at this stage there can also be upticks in client satisfaction as the design begins to be a little more tangible. All in all, though, the trajectory is now tending downwards.

Stage 4 - Planning application
This stage refers to the specific processes within the Irish building control system, but this system is mirrored to a greater or lesser extent across many countries. The submission of the application for planning permission can result in a sudden soaring of client satisfaction as this marks real progress toward the finish article. However, the planning process (and all the other statutory application processes such as Fire Safety Certificate, Disability Access Certificate) is fraught with uncertainty including invalid applications, objections from neighbours, appeals, grants with conditions that are unpalatable, refusal of permissions and appeals of various kinds. Thus, the initial euphoria tends to decline over the course of the process, but spikes again once all the processes are negotiated and the applications are granted.

Stage 5 - Tender process and value engineering
The tender process erodes the gains made by the granting of the planning permission. The preparation of specifications, detailed drawings and so on by the architect at this stage is time consuming and labour intensive, but without much visible progress in the eyes of the client - much of the correspondences from this stage shows growing frustration in the client at perceived delay.

Drawings, specifications and other information are issued to builders, and prices are returned. The completion of the tender process is the moment when costs are crystallised. While this may represent a high point of a cost coming within the client’s budget, this is not an experience which the authors have regularly enjoyed. More usually, this part of the process brings the realisation that the budget does not match the ambition. Much trust evaporates at this point. However, the Rubicon has been passed some time ago (invoices for the previous design stages have been paid) and if the client is to get anything of value, they must persist. Eventually, the level of trust in the architect improves as design ingenuity and judicious editing realises cost effectiveness, and this allows the project to progress.

Stage 6 - Site operations
Once again, the beginning of site operations results in a spike in trust between client and architect as a very tangible goal is reached. Initially, the trust level generally increases, as many of the early construction stages are completed quickly and are very visible - the digging of foundations, building of masonry. However, this stage of the process is fraught with the most uncertainty, with unexpected problems (ground conditions
being more difficult than anticipated, for example) and additional costs emerging. The trust levels fluctuate with each disaster or unexpected delight at the revelation of the quality of the design. There is an additional complication at this point in the form of a third party, namely the builder. There can also emerge a toxic incentive between the builder and the architect to blame each other for any delays, whether it be a delay in issuing information on the architects behalf, or tardiness in building the building on the builder's side. However, the overall trajectory is downwards. As the build progresses, satisfaction usually slowly erodes, as many of the later stages of construction (mechanical and electrical services, for example) tend to take time without yielding spectacular visible results. There is an upward spike at practical completion (the moment the building is occupied) but this is swiftly followed by a downward plunge with the final account, which is the final calculation of the building cost. This is the point where all the extra costs are finally revealed, which inevitably involves the contractor seeking to maximise their profit and the client seeking to minimise their costs.

Stage 7 - Post contract and occupation
Although not strictly speaking part of the design process, post occupancy is considered in this research, as the design is still being revealed to the client, so the graph is still changing. The snag list, which is the process where defects and flaws are identified after the client has occupied the building, and the contractor fixes them, involves a slow downward trend for a number of months after occupancy, as the client becomes increasingly frustrated at the slow pace of snags being addressed. The client perceives this as a loss of interest on behalf of the architect and contractor, which may be the case, but is also reflects the reality that many of the knottiest problems emerge at this stage and tend to be the most difficult and time consuming to resolve.

However, after this period has passed, the client's trust in the architect begins to improve, as they can enjoy the fruits of the labour, while the pains of the labour itself are forgotten.

Lessons from the past
It is worth noting at this point that we have a number of historical records of building projects which describe the often fraught nature of the process. Most illuminating are the site records from the building of the Custom House in Limerick City (now the Hunt Museum). As this was a custom house and concerned with the collection of taxes, it was financed by the exchequer, and there is a complete record of minutes from the site meetings in the late 1760s (Hill, 1999). We see clearly a disintegration of the relationship between the architect and the client, relating to delays and cost overruns, with builder blaming architect and architect blaming builder. For any architect who has chaired a contentious site meeting, these records are eerily familiar. Today, of course, this animosity is an historical curiosity and the building is considered to be a triumph of architecture and treasured by all the citizens of the city.

Discussion
It is important to educate the client not just about architecture, but about the design process itself and specifically the turbulent nature of that process.

The clearest lesson to be learned we believe is the importance of expectation. The more precipitous plunges of the graph are generated not necessarily by the change in circumstance that trigger the plunge, but by the divergence between what was expected and what actually happens.

However, dour pessimism will not inevitably lead to a happy client architect relationship. While the architect can believe, and be right, that the beautifully sunny window seat will be worthwhile, the client needs faith and optimism to plunge into the unknown and trust that barely comprehensible drawings will yield a thing of beauty.

There ought to be an appreciation by the client, and an acknowledgement by the architect, that the process is a difficult one, and that while there might be low points, eventually the process will yield the desired result. Showing the client this graph would illustrate that the process, if somewhat turbulent, is tried and trusted. We have also seen that there is consistency to the overall trend of the graph across a number of separate projects, and fore knowledge of the most difficult phases of the relationship would be very useful to client and architect.

The architect in practice rarely has time to look up from the coal face and consider the larger picture of their practice and the mechanisms behind the processes in which they are daily engaged. It is worthwhile for the practitioner to stand back and consider the entirety of the process and thus gain insight that will allow them, if not greater efficiency, then a better night's sleep and a happier client. Of course we accept that the presented graph is based on a small sample, and would certainly not reflect the experience of clients with repeated experience of the design process, or clients engaged with projects with large budgets, as mentioned above. However, it is worth considering on all projects that the architect client relationship is of critical importance in the making of design, therefore, an understanding, or even a reflection on this relationship, could not just mitigate potential problems, but could even enrich the process.

As mentioned above, one of the critical differences between the artist and the designer is that the existence of the client or patron is a prerequisite for the designer but not necessarily for the artist. We would make a clear distinction between audience and client. The presence of a demanding client is a driver of creativity, a constraint that propels an ingenuity and openness to true innovation. However, to take advantage of this tension, the designer has to be aware of it and accept it as a normal part of the process - architects need to embrace the fact that the best clients are often the most challenging.