An architectural traverse: the idea-reality connection, argument for social housing

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ABSTRACT: The assertion that housing propagates the mixing and division of socio-economic classes in cities constitutes a significant portion of studies on socio-spatial segregation and integration. Of the two themes, studies portray housing as being responsible for driving more division than mixing. One of these such housing is social rental housing (SRH), which although designed as a vehicle for integration has often resulted in ostracization of the occupants and even of the housing development (Pendall 1999, Tighe 2010). While countrywide statistics demonstrating this ostracization and consequent opposition is not typically documented, cities around the world; in Australia, Canada, United States, and Europe show rising percentages across themes known to prompt opposition. As a social asset; we hypothesize that the problem with housing, specifically as it pertains to facilitating integration for the poor, is one of transference; that is, how can a bridge between ideas for socialization and the realization of integrated communities be effected through the design of SRH? It is our submission that a review of situations where attempts at transference are evident is necessary to understand its process. In this present paper, the intention of the authors is not to prove their hypothesis but to test it by making connections between several elements – education, educational model, and the role of the architect – as an indication of the complexity of the issue, and designing a conceptual/flow model to reveal the forces at play in the transference process. Therefore, while we discuss the aforementioned elements responsible for the mismatch of architectural idea and outcome, our focus is on architectural practice with respect to the transference of the architect's social intentions into lived reality in the resulting building and its community. By deploying literature investigation into intellectual posturing, and best practices, we discuss two case studies (Tete En L'air and Hatert Housing) that hold promise for the future of successful transference. Initial reviews indicate that the motive for design for these projects was not solely for the purposes of providing accommodation and comfort for its inhabitants but for mixing of socio-economic levels and neighbourhood integration, which was ultimately achieved. Alongside case study review, this paper considers some philosophies of pragmatism in design - specifically those initiated by John Dewey, with the hope that his suggestions could constitute a basis for the actions implemented in the cases.

KEYWORDS: architecture, social housing, socialization, realization, design thinking

INTRODUCTION

"Bring ideas in and entertain them royally, for one of them may be the king."

Mark Van Doren (BrainyQuote, 2019)

The idea-reality connection is a delicate one that is discussed mostly philosophically. In order to grasp our argument about these two concepts, we consider the definitions from Descartes and Hegel noteworthy. According to Descartes (cited in Smith 2018), an idea can be defined "as an operation of the intellect… that expresses the objective sense". Hegel (2014) builds on this definition by opining that, "ideas are something far too excellent to have actuality" (par. 10) although "they may be co-extensive with reality itself" (par. 1), and reality, "the result of a process of mediation; not a first principle, but a last result" (Hegel 2014, par. 2). The Hegelian philosophy (2014, par. 2) further emphasizes that:

Reality must be defined, and its definition comes only with developing experience and the growth of knowledge. It is only the labors of thought that can lead us to the land of reality (Hegel 2014).

While the expectation that an idea be completely realized may be futile, there should be substantial similarities between an idea and its end product. T. S. Eliot compares idea and reality to motion and action, and like Descartes, acknowledges the divide between both concepts. However, Eliot *also* opines that every idea does contain a level of objective reality, which implies that they are not completely disconnected from that which is ultimately representative of them. The same can be said of the idea-reality connection in housing design. Generating a good idea is one of the most important parts of the design process; and a good idea requires the accumulation of knowledge towards conceptualization. C*onceptualization* differentiates the idea-reality connection in philosophy from that which exists in design. While the word in itself does not constitute a third wheel when the idea-reality connection is discussed in design, it is a necessary phase in the translation of design ideas to reality. Some of the foremost designers and Architects such as Frank Gehry not only advocate the importance of the idea-reality connection but also that of conceptualization in its implementation.

While Architects have "traditionally seen themselves primarily as creators of static objects called buildings" (Simpson 2014, par. 5), Dreessen (2015) adds that architecture through the same static buildings, is capable of bringing communities together. These buildings which are "teeming with human activity, constantly changing, and adapting to the needs of their occupants" (Simpson 2014, par. 5) can improve physical experience, preserve and amalgamate communities, and meet socio-economic needs of the community's residents (Dreessen 2015). It is with regard to the last two arguments that this paper focuses – improvement of socio-economic standing for the poor through housing towards community integration.

The authors have selected SRH as the specific housing type for the study, because rented accommodation elicits more opposition than owner-occupied houses (Obrinsky and Stein 2007); pro-poor housing – the category within which SRH belongs – and its occupants are characteristically marginalized and resisted by the larger community when situated within non-poor neighborhoods (Pendall 1999, Tighe 2010); and our goal is to understand and achieve idea-reality transference in SRH design towards creating socially integrated communities. Based on studies conducted by Harvard University (Matta and Ashkena 2003), we acknowledge that there are other reasons why housing designs, which set out to propagate social integration within neighborhoods fail, such as: insufficient research, lack of commitment, lack of strategy to execute, limitations surrounding timing, and the unrealistic expectation of the designer but by far the most recurrent is the one our study discusses (Bashier 2014).

1.0 UNDERSTANDING THE IDEA-REALITY RELATIONSHIP IN DESIGN
This section discusses three elements known to constitute obstructions to the idea-reality transference in architecture. While we discuss the impact of architectural education and the educational model, and architectural practice, we do so solely as a means of highlighting the forces known to have the greatest impact on the architect's ability to appropriately execute his/her role, as well as on the overall performance of the architect.

1.1 The underpinning of the *transference* challenge – architectural education
The transference challenge in architectural design has remained a major cause for concern for researchers globally (Bashier 2014). One of the triggers identified to be at the root of this failure to transfer is architectural education; the past century has witnessed very little change in architecture pedagogical culture (Koch et al 2006). Design education, as undertaken in the schools of architecture, appears to be preparing students for models of practice that are no longer in full accord with the current professional context (Nicol and Pilling 2005).

A report by the American Institute of Architecture Students (AIAS) indicates that the issue with architecture education is linked specifically to the "design thinking process, which is the most critical aspect of design education" (Bashier 2014, par. 2). The "report casts doubts on the effectiveness of current studio practices in providing adequate design-thinking education" (Bashier 2014, par. 2). The report focuses on design-thinking education as it relates to the

design process and ultimately, the final product. It opines that the inadequate teaching has resulted in students paying *either* too little or too much attention to the design process and the final product respectively (Koch et al 2006). This implies that there may be a strong design idea but the effort required to translate this design to reality is a process that students are willing to "jump over" (Bashier 2014, par. 5). The consequence of this being the students' "reliance on intuition, disregard for the design process" (Bashier 2014, par. 6), lack of focus on idea translation, "focus on self-satisfaction, and the lack of interest in achieving social targets" (par. 6). The danger in this is that the end product is typically inadequate.

Weaver's (1999, 35) study on a similar topic confirms that the very essence of architecture is its end product - to "determine human needs and to express them in space and form". In principle, he opines that architecture is about practice, and revolves around pragmatism. Architecture and design can only candidly be learned and mastered through practice, through continuous attempts at problem solving (Weaver 1999). In the academic context, these problem-solving opportunities are called a 'crit' or 'jury'. The crit (critique) is
not only an assessment method but an essential educational tool, which is a standard feature of architectural education and is employed all over the world wherever students are taught in manageable numbers (Weaver 1999, 38-39).

The pragmatic nature of architecture implies that the student cannot be taught everything but they should be taught to think like an architect. Although the crit, which is the medium through which the student begins to express their ideas and build 'experience', is the strength of the architecture student, Cuff (1991) opines that the crit is one of the weaknesses of architecture education (6).

1.2 Architecture: a profession of experience… and communication
According to the National Center for Information and Documentation (NACID), architecture is one of few professions, that typically makes mention of 'practical experience' in its definition. To be an architect, the individual has to have garnered specialized training comprising several years of an advanced education as well as a period of practice during which the training is tested and experience is built towards earning a license to practice. In fact, the most fundamental definition of Architecture, provided by the Cambridge dictionary, defines it as an "art and a *practice* of designing and building structures and especially habitable ones", where practice speaks of the "repeated exercise in the performance of an activity to acquire or maintain proficiency in it" (Cambridge Dictionary). David Lau (2018) who also emphasizes practice/experience in his definition of architecture highlights that not only is the experience of the architect important but also that of the user. He states that:

> Architecture is basically designing for the user based on the *experience* of both the Architect and the user on a physical and spatial level, where space is just another medium and buildings and structures are the interfaces and frameworks that users can interact with (par. 5).

Besides the experience – on the part of the Architect - that Architecture requires, communication/consultation is another key issue that Architecture appears to be lacking at both the educational and practice level. In Dana Cuff's (1991) book, *Architecture: the Story of Practice,* Cuff asserts to the inward focusing that transpires in the design studio, while students prepare for their crit; students begin to isolate themselves "from the outside world, knowing only how to talk to other architects" (6). This, Nicol and Pilling (2005) say carries through to the student's professional career, where they very seldom consult users except in situations where the design/project is owner occupied. This is what Cuff (1991) terms 'the primacy of the individual', which should not be but rather, in contrast, the role of the architect "should be one of 'translator'… and 'integrator'" (Nicol and Pilling 2005, 6). The former, so that the architect can "mediate between human function and the final form" (6), and the latter, so that the design and its final form can "draw people, process, and place together" (Nicol and Pilling 2005, 6).

1.3 Architecture: providing neighborhoods and residents social assets – *housing*
One reason why SRH continues to be confronted by opposition is because of the stigma it is

associated with (CMHC cited in Victoria Homelessness 2014). The stigma is categorized along 6 themes (Victoria Homelessness 2014, 2): (negative impact on) property values, (fear of) crime and (fear for) safety, density (resulting in congestion and strain on infrastructure), (fear that the low quality materials, aesthetic unpleasantness, and poorly integrated structure will ruin the) neighborhood character, new resident behavior ["influx of residents that may not share similar values or social norms" (Victoria Homelessness 2014, 2)], and existence of enough pro-poor housing (therefore developers should look elsewhere). Half of these fears are linked to the structure itself, which implies that the problem is rooted predominantly in the poor design of SRH (Iglesias 2002). Hulse et al. (2012) states that this issue with poor design poses a hindrance to allowing SRH play its key role, which is largely one of propagating social inclusion. *How?* In a majority of countries, SRH is deployed as a housing type provided for the poor, who otherwise are unable to compete in the marketplace for housing of an acceptable standard (Oxley 2009). The rationale behind SRH is that as a social asset, it should provide the "household with a safety net, sense of citizenship, and belonging" (Urban landmark 2009). SRH is sometimes considered one of the policies provided "under the banner of social inclusion" to "ameliorate problems that are manifestations of socio-economic disadvantage" and to "enhance the capacity of those excluded from accessing mainstream services and employment opportunities" (Hulse et al. 2011, 12).

SRH, when properly designed and constructed should first, provide the status improvement that enables its residents be perceived as a worthy population in the neighborhood and be accorded due respect that enables social mixing (Gregory et al. 2016); and second, be perceived as an important and necessary part of the neighborhood for creating heterogeneity and ultimately a balanced 'community', rather than be considered an unwanted land use (Gregory et al. 2016).

1.4 Defining the specific problem

As this study seeks to support the hypothesis about (idea-reality) transference, it is important to determine that indeed the architect holds primary responsibility for such transference. Additionally, because our paper makes the case for SRH, which has continuously been confronted with issues of opposition, we find it is also necessary to determine that the architect indeed holds the pivotal role of integrator towards the goal of realizing integrated communities.

Despite the assurance in research about what SRH should be, the reality is that its goal is very seldom actualized. Therefore, this paper seeks to answer the question of how SRH can be used as a ligament between ideas for socialization and the realization of integrated communities. To answer this question, we have chosen to approach it from the viewpoint of the architect because housing and housing design – key elements in this study - are fundamentally the responsibility of the architect. Because an individual's profession is directly and significantly impacted by their education, we focused on architectural education as the foundational cause of this problem.

To understand what either drives or interrupts the idea-reality translation in the architect's design (of SRH), research makes mention of design theories related to pragmatism.

1.5 Pragmatist theory on architecture (and design)

According to the *de facto* design theory, John Dewey's philosophy, design is a creative action that should "create something preferable and respond to expectations" (Ostman 2005, 12).

> The only way we can know that a design idea has been successful, which is the central aim of Dewey's theories, is that the outcome is favorable. Although Dewey admits to our inability to guarantee exact outcomes, he insists that we can create a reasonably reliable outcome through skill and inquiry, where the latter is the very means for ensuring that changes and processes are controlled towards achieving the desired outcome (Ostman 2005, 12). Dewey's pragmatic philosophy of design is not reduced to conceptualization and reasoning on an abstract level but should touch real life problems and actual situations… which must then be brought back to real life for verification (12).

This implies, according to Dewey (1958, 36), that "secondary conclusions" (36) made by the architect be crosschecked and reflective of "the things of ordinary experience" (36) derivable from those for which the design is made. Dewey (1980) states that the bridge that enables the successful cross over of ideas to reality is emotion. He refers to emotion in this context as a "fusing power" (Ostman 2005, 13), one that forms an integral part of the pragmatist theory and therefore must not be excluded. Based on his studies, he opines that although emotion is

Linked to our exercise of value judgment… it is a manageable unit in the understanding of design problems, processing of design solutions and successful execution of design operations (13).

2.0 LESSONS FROM THE PRAGMATIST THEORY-CASE STUDY COMPARISON
This section justifies our rational for hypothesizing the existence of a connection between the lessons from cases and John Dewey's pragmatist theories.

2.1 Why look to the pragmatist theory of architecture?
Over the years, the *object* of architecture has been investigated such that despite the architect (designing the idea), and the approach, the result typically is a building that has fundamentally been reorganized – one with little dissimilarity from what previously existed (Ostman 2005). Ostman (2005) compares this to industrial design where, traditionally, with every design, consumer and market surveys are initially conducted, which results in characteristically functional products. One could therefore argue that the architect may need to grasp and apply the idea and process of inquiry into *user* experience, so that architecture can *be* what it is - an important vehicle to support healthy human life. In the same vein, Dewey (1938) rejects the thinking that the physical is the most important in investigations towards design; rather, he proposes that the prime focus should be relational. His attention was on altering the relations in real world situations while emphasizing the need to trust in the human experiential contribution and the democracy of those contributions (114, 245). Essentially, Dewey (1938) was making an argument for the architect to focus more on the source of knowledge founded on daily interactions and experience, which he indicates is the "true knowledge" (66) required. He adds that this in no way negates the importance of scientific methods, research, and the architect's logic/reason, and experience from practice, which are all necessary for creating the knowledge required for successful design outcomes (Dewey 1938). However, in isolation of any of the other elements, Wolfe (1999) calls the architect's logic/reason incomplete and "improper" (17).

The whole "truth" about architecture and architectural design is not to be found in the reasoning. Reasoning is but one tool (Wolfe cited in Ostman 2005, 147).

Another noteworthy element Dewey highlights is the difference in tastes according to social class. He emphasizes that design must appeal to all social classes (Dewey 1980). We believe that this element may be one of the key reasons for the continued opposition towards SRH within non-poor neighborhoods. Based on Dewey's (1980) assertion, and in alignment with our estimation, it is at the point of design/construction that the architect determined that the selected materials – specifically those used externally – were befitting to the development and the status of the residents, without considering the perception of the existing neighborhood residents. According to Dewey (1980), addressing the aesthetics is "not a short moment of insight… but a whole process of doing", it is not a "simple pleasurable activity but one of undergoing, of suffering, … which might be painful" (41). This is because when the architect believes he may have concluded work on his design, he has to continue to work on that design, refining it to ensure that it fits into its designated site - in terms of the existing fabric and character of the neighborhood. The idea of the new design fitting into the existing fabric and character of the neighborhoods refers specifically to another prong within the aesthetic section of Dewey's theory - that of context-relationship (193), which holds that every design or object should not be designed in isolation but always in context to avoid the introduction/injection of conflicting elements that may unfavorably impact the situation (36, 195).

Dewey (1980) also highlights a theory that removes the architect from having the sole responsibility for the design, and the direction/outcome of the project (Ostman 2005, 322) to

making it the role of "the users and other parties" (322) so that the outcome is a product of cooperation and therefore holds a higher probability of success.

The final theory amongst Dewey's (1980) theories that the authors discuss is that of *newness.*
> Design is a controlled creative action. The control, however, cannot be complete. There is always a space for changes and discoveries, and therefore the creation of something new.

The implication of this is that although the object to be designed remains the same, the findings from previous attempts should inform future efforts, and result in a positive/more favorable change of outcome. This then begs the question as to why SRH has continued to maintain a global reputation of prompting opposition despite innumerable design and construction attempts. Where is the *newness* that should be manifested with the execution of subsequent efforts?

2.2 Social rental housing cases with evidence of the idea-reality transference

For decades, in the SRH discourse, "anything above the bare minimum was lavish, and anything lavish was an insult to the public purse" (Williams 2017), and therefore considered a waste of funds. The pride of housing ministers at the time was speaking "about stripping 'unnecessary' extravagancies such as balconies and windows" (Williams 2017, par. 1) from SRH developments. The result was a "dishevelment of social housing" (Williams 2017); where developers delivered faceless, characterless, poorly planned, high-density blocks, situated on lands with high costs, which are an antithesis of what SRH should be. SRH should not "just provide a roof and four walls but should utilize creative design to make low-cost buildings feel like high-quality homes" (Nettler, 2013). The poor nature of these developments has persevered until today, and has begun to impact the universal ability of architects to create a "proud… and awesome social housing building and environment" (Williams 2017, par. 3).

Amidst the stigma associated with SRH, a handful of countries have realized that one of the best combat strategies against the opposition stemming from the typically unpleasant SRH development is to ensure that the development affords those who need them the dignity of well-designed and distinctive homes. Mostly within Europe, a majority of the notable examples include developments from Slovenia, Spain, France, Belgium, and Netherlands. These developments have been termed 'successful' for the following reasons: (I) effective land use planning, (II) appropriate design, (III) assurance of social cohesion, (IV) affordability, (V) aesthetic pleasantness, and (VI) appropriate construction (Oyebanji et al. 2017). These translate into housing developments that successfully mix people from the different social classes.

The two cases this study will review are Tete en L'air Social Housing and Hatert Housing. In 2014, Arch Daily rated both of these developments among the top five SRH developments worldwide (alongside Monterrey Housing by Elemental, Tetris Apartments by OFIS Architekti, Savonnerie Heymans by MDW Architecture) (Scott 2014). These cases will serve as both instrumental and intrinsic case studies, which Barzelay (2007) states refers to cases used to understand a bigger sample and reveal the richness of the case respectively. In this era of increasingly conscious SRH designs, these two cases have maintained top ten ranking among SRH developments globally by various articles, and have also been noted as breaking the mold of what SRH has typically been by helping to undo the negative stereotypes, and serving as remarkable works of architecture thus eliminating opposition. This prompts us to assume that because the projects appeal to a wide range of assessors, there is the possibility that they were successful in achieving aesthetically pleasant designs and integrating both the building and its residents into the neighborhood. According to Wood (2017), both developments are "safe and resilient housing projects" (5-6), which
> "foster the greatest sense of community between its residents… and build lasting personal relationships within the neighborhood through direct and indirect connections established by sharing common areas of living" (6).

While we are unable to state emphatically and explicitly that these cases are success stories, a review of the intentions of the architects and the outcome for both designs reveal an alignment with the ideas and hypothesis of the authors. Furthermore, based on the criteria of

success proffered by Oyebanji et al. (2017) above, we are convinced that the cases reviewed are indeed, favorable.

In the following paragraphs, the authors will discuss various other noteworthy points from the cases alongside some of Dewey's.

TETE EN L'AIR by KOZ Architects
While there is little to no academic review of the project, the popular Architectural Digest, Arch Daily, which accords the building the 'Building of the Year' award for 2013, shares excerpts from interviewing the architects behind the design.

The Tete en L'air (Tel) social housing, built in 2013, is situated on a deep and narrow plot in a working class area in Northern Paris. With this building, the aim of KOZ Architects was to provide SRH that could be perceived as a "small scale utopia" for its inhabitants and promote the idea that SRH can evoke a feeling of pride, community and togetherness for the entire neighborhood.

To transfer their intentions to reality, the initial idea of the architects was to avoid altering the character of the area allocated for construction. Their primary step therefore, was to study the street-life of the area, which they found to be "dense and energetic" (Vassilopoulou 2014). The first thing the architects did was to ensure that the old structure, which was in extremely poor condition, on the allocated site was not demolished rather the "original structure was preserved in order to maintain the picturesque nature of the street" (Vassilopoulou 2014). Their knowledge of the street and area is noted as being the main influence to the design of the structure. Furthermore, the building was designed to emanate sophistication even while engaging with the neighborhood. The design, which features boxes "plugged into the façade rhythmically, gives the building a spontaneous character" (Vassilopoulou 2014) that resonates with the energy of the street and neighborhood. The architects were convinced that to blend the building into the neighborhood, it had to have a very 'natural-looking' façade/exterior. To achieve this, they decided on building completely in wood, as well as incorporating courtyards, shared spaces, pathways, and public gardens within and through the premises to allow the residents enjoy a high level of comfort/quality of living, and for the building to draw neighbors and members of the community unto the premises thereby fostering inclusion and mixing.

Figure 1: Tete in L'air. Photography by Cécile Septet (Chua 2014)
Figure 2: Housing Hatert. Photography by 24H architecture (Chan 2011)

HATERT HOUSING by 24H Architecture
Hatert housing, popularly known within its city's boundaries as 'the crown of Hatert', was built in 2011 in Njimegen Netherlands. At the time of design/construction, "housing in the Hatert area was undergoing a great renewal project" [Natrufied, 2019 (formerly one-half of the

founding partnership for 24H Architecture)] because a significant amount of the city's housing required substantial renovation. The intention of the architects therefore, was to produce SRH that would comply with contemporary housing standards that the city was working towards (24H Architecture 2011). The first step towards achieving this was to work in collaboration with the city of Njimegen and the office of Khandekar to access the city's master plan in order to either identify available land within (a) neighborhood(s) where "most of the present houses were renewed, or identify a new neighborhood, which would be filled with new housing projects. Following the option of the former, and therefore well suited to the neighborhood within which it would be constructed, the architects designed a 72-unit, 13-storey tower atypical of the traditional boxy-block social housing buildings. To create the intentioned modern design, the architects chose to add some irregularity in its form in order to express a strong visual identity thus the building featured "free-form balconies wrapped around the building with metal screen railings" (24H Architecture 2011), visual harmony with its surroundings, and elements (such as a public space and community health center) that would facilitate socialization among the residents of the building and members of the neighborhood (24H Architecture 2011). Its contemporaneous nature has resulted in it becoming a landmark within the neighborhood that is located.

2.3 Correlations between the reasons for success in the cases (lessons learned) and Dewey's theories

"There have been recent attempts to invoke the pragmatist philosophy into architecture" (Ostman 2005, 321).

Dewey's theories, unlike the relationship proposed by several others, have been able to take an approach that is most devoted to social action and comprises some ideas with which our idea finds the most common ground. The cases introduced above, similar to Dewey's theories, focused their designs around the same theme; towards ensuring that their ideas for socialization resulted in the realization of integrated communities through housing design.

Based on the review of the two cases highlighted above as well as myriad other SRH success stories, research reveals that SRH successes fall under one overarching intangible reason; *the architect never losing sight of the goal of the development.* The present review also divulged the following sub-reasons and recommendations:

Successful idea-reality transference is primarily a result of cooperation. In thinking that the architect is fully 'in charge' or is the 'lone designer' of the project, the source of input into the design is limited to a circle of fellow architects, which severely impedes the probability of neighborhood acceptance and integration. What Dewey suggests and what is observed from the case studies is a project, where "each party works on his/her own understanding of the design's qualities" (Ostman 2005, 322). For instance, "the architect cannot administer aesthetic judgment alone" (322) and therefore requires a variety of perspectives. Because of the diversity of aesthetic thinking especially as it concerns parties who are directly impacted with the project, the architect should act as a tool for these parties, who may build on the architect's own aesthetic ideas. The architect therefore, should collaborate with other parties on such projects but maintain some form of autonomy. As seen in both cases, there was cooperation between the architects and the neighborhood/planning authorities/government. However, following this collaboration, the onus was on the architect to decide to what extent contribution from stakeholders will be retained/implemented in the design.

Our studies showed a solid, on-going communication and relationship with authorities, governments, and a host of other stakeholders within the cities that the SRH developments are erected during the period of their construction. In a bid to avoid working in isolation, and in the midst of a barrage of contributions, the architect risks losing the clear image of the end product initially set for the proposed development. Thus, while guiding theories, evaluations, and opinions are necessary, the decision on which contribution to implement or disregard should lie with the architect so that the end product, which may have been modified based on stakeholder participation, still reflects the architect's idea towards neighborhood socialization and integration.

Communication is critical because the cases identify it as being the backbone of their projects. In fact, the initial steps taken towards the design of the cases revealed continuous and clear communication between the architect and stakeholders. For project success – as evidenced by the cases – the architect must use communication effectively and be influenced by properly understood and processed information. According to Taleb et al. (2017, 2), "project outcomes increase due to effective communication". 24H Architecture, the architecture firm responsible for Hatert Housing, emphasized their utilization of the two forms of communication, verbal and non-verbal communication. Studies show however, that the architects considered verbal communication the more efficient of the two. Information between the architects and the other stakeholders was executed via channels that were both physical and electronic, and comprised renderings, drawings and written documentation. Based on excerpts from both Architecture firms, communication with stakeholders commenced prior to conceptualization of the project and was carried through to completion with specific groups such as: the planning authorities and the residents of the neighborhood (24H Architecture 2011; Vassilopoulou 2014). The content of the communication between the architect and the stakeholders varied according to the group. For instance, 24H Architecture reveals that the firm collaborated with the city (planning authorities) for general information (site history, topography, boundaries, plans for future expansion, etc.) and planning/building considerations (impact of local development, rights of access, party walls etc.).

In alignment with Dewey's (1980) arguments, the architect is only able to exercise autonomy through communication. The architect's ability to articulate the design, design process, design qualities, and the design motivation is crucial.

> The execution of a good design often requires verbal motivation. The design process is far too fraught with conflict, and the parties often too far from each other, to trust that the solutions speak for themselves (Ostman 2005, 322).

The architect needs a thorough knowledge of the design they propose and its benefits in order to enforce its validity and suitability to the context.

From studying the breadth of information available on both cases from the websites of their respective architecture firms, the clarity and understanding of the goal and objectives for each project was explicitly stated from inception. This enabled the architects to recognize which portions of suggestions from stakeholders could be disregarded/observed -- which compromises/sacrifices they could make in order to ensure that the stakeholders identified with the project.

Looming large is the development of a practically-thinking mindset. The architects with the responsibility of designing the SRH development focused primarily on executing a functional design. This, we observed is evident in the step-by-step outline of the bases for the decisions taken in the creation of the SRH design. While both cases have evidence of this, the latter does more so than the former. Besides the creation and construction of a SRH design that would be capable of satisfying the needs of its residents with regards to the provision of shelter, affordability, and adequacy, the architects also achieved a building design that would be practical in its goal of integration and acceptance within the neighborhood by including amenities on its premises that would guarantee the visitation of the larger community.

Although architecture needs the knowledge, perspectives and grounding of theory, these should be instrumental in making design execution more intelligible. The architect should always remember that "a good-looking, well functioning and economic design is preferable to those where there are deficiencies" (Ostman 2005, 330). We believe that with this pragmatist mindset, architects would desist from designing SRH buildings that are ugly, and unfavorable to both the residents and neighboring community specifically when research indicates that such designs/buildings are frequently abandoned, demolished, and/or underutilized (Fatoye 2009). In some circumstances, as is seen with the first case discussed in this paper, the housing provider proceeds to return to the initial site to erect another development resulting in a duplication of effort/resources. This is avoidable if architects can consider the practicality in

doing away with the long-standing notion of faceless, characterless, poorly planned, high-density SRH blocks, and make the goal of every SRH design be to get it right the first time. Education matters. The aim of learning is improvement and understanding. The architecture firm, KOZ Architectes, responsible for the first case referenced in this paper, referred to the education gained from not only their academic study, but that gained from considering older, global successful SRH examples, the desire to continually improve on future social housing projects, and the experience gained from years of designing social housing as influential to their continued success in social housing provision. Dewey (1980) agrees; he discusses the idea that one cannot learn all about their profession from the requisite academic education but must reach into other areas – life, practice, and related fields. For such an integrative discipline like Architecture, the architect needs "an interdisciplinary approach to learning, combining and comparing ideas from different fields" (332).

> "A stronger integration of design knowledge from various (design) fields and sources - than the current situation - will presumably produce more than a few successful architects... an architect will not be able to execute design successfully in the field *just* because he knows the basics of design" (Ostman 2005, 332).

CONCLUSION

In the present paper the authors have argued for greater connections between education and practice, for heightened efficacy in both realms. Even more emphatic is their argument for enhanced collaboration between the architect and stakeholders; most notably on the part of the architect - the architects willingness and ability to listen, learn and respond; to *communicate*. Our suggestion that communication be used as a vehicle to bridge the idea-reality divide (in the form of the communication technique applied, points in the time line of the project that communication was critical, types of communication utilized, and the subject of communication during the lifespan of the project), the critical review of the literature, the case study methodology, and our model (that views the forces at play in this context more completely) are contributions we believe are necessary, and that we have made, which are significant advancements, albeit insufficiently developed at present, to build support towards our hypothesis.
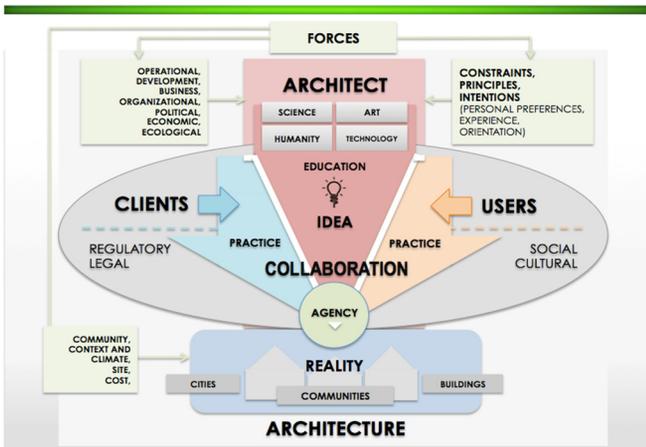

Figure 3.

The model noted above underscores the pressing need for systemic reform whereby the architect (and associated stakeholders) work in close cooperation with clients and users to bring solutions to fruition that are responsive, responsible, respectful and appropriate. Too often the players in the equation operate in isolation, with inadequate evidence and with narrow agendas in action. The authors suggest that new ways of seeing, learning, conceiving and constructing are in order at the present juncture. For housing to better suit its needs, and to be embraced by a broader audience, architects must connect meaningfully to the

communities in question, must discharge their responsibilities ethically, and must realize solutions that resonate with needs, culture and context. To achieve this, both education and practice need overhauling in rather dramatic and innovative ways.

For the global community in an era such as this, where the expectation from professionals – one of whom is the architect - is ever increasing, the present paper has dealt with architecture and the idea-reality/transference concept, with particular emphasis on John Dewey's pragmatist theories. Designing for the benefit of different social classes; to guarantee comfort, for effective functionality, and to attend to the needs of the users requires a more relevant architectural educational background alongside experience/practice, and continuous professional development. The combination of these is able to furnish the architect with the knowledge to successfully convert design ideas to reality and in so doing, provide SRH that breaks the mould and achieves the primary purpose for which the housing type is provided – to drive social mixing and integration within neighborhoods. We are of the opinion that the more architects are able to acquire well-rounded knowledge, the more opposition towards SRH will continue to diminish. As in the cases highlighted, a SRH development that excels in integrating neighborhoods is indeed achievable and in the present paper, we discussed elements we found that are: i) present in both cases, ii) lessons that are transferrable architect to architect, and, iii) foundational for successful transference.

Upon commencing the study, we speculated about the need for more practicality in architecture towards successful transference. A review of John Dewey's pragmatist theories on Architecture divulged a substantial connection with realizing architectural ideas. The connections we discussed do not form an exhaustive list therefore we recommend that supplementary cases be studied simultaneously in order to uncover additional connections and lessons. We also make recommendations for improved architectural education and the acquisition of knowledge and skills in order to make the global SRH change needed. This work remains urgent and timely as part of an on-going research. The present paper is connected to the doctoral research of the first author, with an intention to broaden the understanding of forces in place towards that the development of opposition-free, integrated, affordable, and adequate SRH.

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