# HAWKER RELOAD

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00 Preface, by Alvin Yip

# Abstract

This book is a summary of the 10 months research work that we have conducted on how the hawker stalls on Fa Yuen Street may improve and develop. The subject of research are confined to Fa Yuen Street mainly because of it is a fine representative of a typical street market typology. There are two main reasons that have contributed to the selection of Fa Yuen Street as the pilot study subject: 1) the local relationships that some of our investigators have established with the local community, 2) the wide availability of the research works offered to the public after the fire accident on Fa Yuen Street which claimed 9 lives on November, 2010.

Hawker Reload may is a Social Innovation project, and the team is cross-disciplinary within the Hong Kong Polytechnic University. Apart from the members of the Jockey Club Center of Social Innovation(JCCSI), all of the investigators/scholars are invited by the JCCSI and have participated in the project voluntarily; in which they have contributed enormous time, effort and their expertise for one purpose only; that is the betterment of our sociality and our city.

If there is one single critical spirit which is manifested by Social Innovation, it should be its cross-disciplinary nature; the team is formulated by a team of experts who specialized in a specific field of study. The result of the project is nonetheless multifaceted.

Hawker Reload is both a design and research project and the design resolution and the researched material are equally important for our society. Most of the researched materials are first-hand researches that we have gathered from the field work and interviews. We have created a variety of research methods for this project, as we trusted that these public engagements experiences and data collection method derived for this project may be applied onto future public space design projects.

The prime objective of this project (Hawker Reload) is to suggest how the design of the future hawker stalls may develop and how future hawker stalls' design should be responding to the suggestions on the hawker stalls fire safety made by the Hong Kong Governments on 2012 regarding the aftermath of the Fa Yuen Street fire on November 2011 that have claimed 9 lives.

# **00 Introduction**

Hawker stalls in Hong Kong are complex building structures. Typical hawker stalls has a foot print of 2 sq.m and it is approximately 2.5 meter in height. Hawker stalls must be clad by metal for security and fire protection reasons The way which hawker stall is connected to the main power supply(for lighting and air-conditioning) are strictly regulated. Most Hawker stalls are due aspects: meaning that the stalls have multiple openings facets which may engage with the street shoppers. Hawker stalls in Hong Kong will be housing the goods within the after operational hours. During day time, the stalls are sophisticated goods display system and at night, the stalls are transformed into storage cabinets.

This is my initial question: is this an architectural project? Or is it a project to revitalize the hawker stands and its cultural; all of which are treasured dearly by everyone raised in Hong Kong. Hawker stands and the markets are microcosms of our sociality; which it is governed not only by statuary policies but also by the relationship within the hawker stalls operators. Take Fa Yuen street for example, a study subject that we have chosen for the pilot study (which we will cover the reason for its selection on Chapter X)among the 235 operators along this 200m long street, there are two business associations and 2 social concern groups that are responsible for its management and developments. The micro-economy within Fa Yuen Street, is laybrithened, complex, and multitude. It is a lateral controlled economy; meaning that the stake holders and parties involved at Fa Yuen's Street's affairs are in a "hand-in-hand" and "shoulder-to-shoulder" relationship whilst the government concurred with such relationship and have attempted to minimize a "top-down" policy system on local cultural affairs since the British rules.

Yet, after an anonymous fire that have took 9 lives on October X 2010, we panic and begin to unravel our trust towards the community spirit and micro-economy that have kept the "order" in place. Fingers are being pointed in order to such for an easy victim. Such a task is colossal, and although we have succeed in the search for the official answer for the cause of the fire in just about three years, the trust with the community and localism has been severely challenged. It is simple to band hawkers and eradicate the hawker stalls from the face of the earth; which would be the easy answer. We could simply be banding hawker's for sanitization reasons, why can't we band them for which that they are fire hazards in the middle of the city? Why can't we band them for which they are fire hazards in the middle of the city?

The conservation movements of Hawker culture, thus, may not solely be interpreted as an cultural conservation movements; it is inevitably political. The longer that we strolled along our research and public engagement works, the more difficult it is to stay out of its politics. We must constantly remind ourselves the purpose of our project and our positions within this project; that we are academia who are providing the society with alternatives.

This project is the first attempt where Polytechnic University work as a cross-discipline research team in such scale. The team is comprised of experts from four faculties within the school. The establishment of JCDISI, provided the perfect for the project's incubation.

Social engagement is perhaps the most vital element for the project's success. As designers, we are too used to be designing with innovation, visions and most of all: ego. We are too used to be designing for singular clients who might have pre-defined objectives from the projects. We are too used to be asking the important question of :"what do you think, users?" after the design is operating which left little rooms for changes. In short, we were just not very sensitive.

This project allowed us to be doing the reverse; that is to conduct the research before and during the design process. This "reversed" design process posed many challenges: the relationship between the design, the public opinion and government policies' development are symbiotic and they will be influencing each other. Some of the examples was the releasing of the government policies: too often that our planned dates for the field research have to be postponed due to clashes with the dates of when the government policies are released. If the field researches are conducted the day after the announcement of the government's intention to relocate some of the hawkers, this might positioned our school as working with the government and truly, this is the last thought that we wish to public to acquire.

Questionnaire from Manfred Yuen (Architect, Lecturer of Hong Kong Polytechnic University School of Design, "Hawker Reload" Project Fellow)

Q: What does Hawker stalls mean to HK?

A: They are one of the most iconic symbols of our city. The next most icon will probably be Bruce Lee followed by the Tram.

Q: What does Hawker stalls mean to you?

A: They are part of my image of our home: friend(but calculative) hawkers, fresh fish, the smell of live chickens. These memories are priceless.

#### Q: What do you think about the Hawkers' working environment now?

A: Exotic, flamboyant, but it is more difficult for hawkers who are sincere in running their own business to make a living if the restrictions on the hawker stand's operations are tightening; to a point where the hawkers may find it impossible to display their merchandises.

#### Q: Please name one of the imperative improvement for the current Hawker stalls?

A: It takes two hours for an average hawkerstand (dry goods) to be set-up in the morning and another two hours for it s daily retirement. The process is tiresome, tedious and strenuous for any human being; albeit the aging hawker operator's population.

#### Q: Why are Hawker stalls important for a cosmopolitan such as HK?

A: Every great city takes pride in their market, e,g Borough market of London, Chatuchak market of Bangkok, Chelsa Market of New York. As a world class cosmopolitan, where else could Hong Kong offer other than shopping malls?

#### Q: What does social innovation means to you?

A: How we may apply our creativity directly into the betterment of our society. Although the invention of the Iphone, also contributed to the betterment of our society, a large part of the investment into the creation of the Iphone are pointed toward an economical return. Social Innovation strive for the direct application of creativity towards the public.

Q: What is the most memorable moment for you over the last 6 months project period?

A: kacey Wong was late for our weekly meeting once. He was only late once! (hats-off to Dr. Wong!)

Q: What have you gained in this project?

A: I could appreciate how a simple design solution may be the resolution for such a complex issue.

# 01 Hawkers Daily Operation in Fa Yuen Street

Let's us meet Mr. Wong, a children garment retailer, at the Fa Yuen street first.

Mr. Wong is not the owner of the hawker stall which he operates but he was awarded an "assistant" license. In another word, Mr. Wong is subletting the vender venue from the owner of the hawker stall. he pay a rent to the owner and he is granted the right to operate the stall.

"I wake up 7:00am in the morning. After a quick wash up and a self made breakfast I will hurry to Tung Choi Street, which is two blocks away from where I live. It is 8:30am.

On the way, I would collect my wooden trolley under the fly-over. It is pretty heavy and robust, it is around 1.5 X 1 m in width and 800cm high.

I have pushed the trolley for two blocks and I have reached the "warehouse". The 'warehouse", where I have shared the storage place with eight to ten other venders who are also keeping their stock of clothing, is located in a building fitted with a lift. Thus, I do not have to walk-up as much as some of my competitors.

At 9am I will arrive my stall at Fa Yuen Street with my trolley. I would first unlock the pad lock of my stall, extend all of the hangers, and start hanging out the clothing one-by-one. The stocks on the trolley will remain on the trolley and what I am hanging is pre-packed in the stall. To display of my clothing is an art by itself. How tiring is the work? Imagine that you will have to do ten times of your laundry every day! The process will probably take two hours. I am aging and I am now fifty-eight, my son could have it all set up in less than an hour, but he needs to be in school today."

The metamorphosis of Fa Yuen Street is completed around 11am. The green pad locked hawker stalls blossomed like flowers in spring. Around two hundred and twenty hawker stalls are now in operation. Fa Yuen street acquired a new face: it is now full of life and energy.

Mr. Wong's stall belongs to a "dry" stall. The government have stratified the hawker stalls into two generic categories: those of "dry" goods and "wet" goods. The set up of the "wet" good stalls may even take longer and on Fa Yuen Street, "wet" goods are exclusively fruit venders' stalls. Setting-up a fruit vending stall can be hard work. After all, fruits have a limited life span and they are heavy. There are only five fruit stall left on Fa Yuen Street. Many people wouldn't wish to work as a fruit vender as it is hard work. In summer time, it rains and Fa Yuen Street became a ghost town. On a hot baking day, the urban sprawl of Mong Kok accentuated the heat by three to five degrees. People sweat and that is bad for clothing business (without air conditioning) but the fruit(and fruit juice) business goes up. The situation is reversed in winter time. Many hawkers cross-ventilated their stalls but introducing as many openings on the stalls as possible. Some hawkers stalls would even introduce more openings towards the shops that are air-conditioned so that they may benefit from the residue cool air.

### 02 Local Support to Hawkers

Two Hundred and Twenty-Three stalls are operating on Fa Yuen street, how would they work with each other? A local trade union do exist and it not only represents the hawkers on Fa Yuen Street, but the hawkers on Mong Kok. This trade union do look out on each other and it necessary, they will voice out to the government. Business and the hawker way of life remained calm and static until the fire which happened on Fa Yuen street on 2010, which have claimed nine lives. Without better knowledge about the cause of the fire, the government have postponed to the inquisition of the fire cause and the trial last for at least two years and it was until 2012 that the government concluded the case.

After the fire on Fa Yuen Street, the question of whether the hawker stalls should be loaded with goods during non-operational hours was raised. Goods loaded hawker stalls with exposed electricity meters were viewed as fire hazards. The public begin to question the existence of the hawker stalls over its cultural value. The hawkers were worried.

The increasing opinion on the question on the hawkers altered the few public pressure groups who have been working with the hawkers/grass-roots. More of the public were increasingly concerned with the survival of the Hawker's livelihood and the diminishing of the street culture.

Street Design Union (S.D.U.) was formed in May 2011 by a few local artists and designers in the hope of reviving the cultural interest of the hawker stalls' design. Street Design Union did not labeled itself as a pressure group, instead, it deals with the issues related to hawkers and public design.

"Street Design Union is composed by members from Hong Kong Design Community, designers, artists, students, and related social concerned groups. The group aims perform research and investigation into public design issues by gathering ideas from experts and proposed solutions, pushing Hong Kong public design towards a better cultural development."\_SDU Manifesto on its Facebook fan page

In July 2011, SDU ran its first street exhibition in Hong Kong, Hawkerama. twenty two local artists and designer groups participated in the exhibition that was held on Fa Yuen Street. The curator asked the artists to create their own interpretation of hawker stalls. A one day event was held. The exhibition raised some public opinions of the hawker's future. In the next year, the event was re-ran twice: Hawkerama II at the 2012 Detour exhibition and Hawkerama Black Market. A core group of artists and designers that were concerned with the hawker's culture was formed.

Questionnaire from Dr. Kacey Wong(Artist, Assistant Professor of the Hong Kong Polytechnic University School of Design, Hawker Reload Investigator)

1. What does Hawker stalls mean to HK?

Essential component in the multiplexing community.

2. What does Hawker stalls mean to you?

An alternative, characteristic and potentiality choice for shopping.

What do you think about the Hawkers' working environment now?
 Panic, disadvantaged, dragged with full of tension.

Please name one of the imperative improvement for the current Hawker stalls?
 A timely and sustainable policy for survival of hawker stalls.

Why are Hawker stalls important for a cosmopolitan such as HK?
 Its friendly and localized style is attractive for foreigners to taste Hong Kong culture.

What does social innovation means to you?
 Tackling complicated social issues through collaboration of multi-disciplinary professionals.

7. What is the most memorable moment for you over the last 6 months project period? Ardent, down-to-earth and in-depth interactions with the hawkers.

What have you gained in this project?
 Facilitation is crucial for breakthrough.

# 03 History of Hawkers

Ah Chung(Dr. Leung Chi Yuen) of the Social Science department have conduct the researches on hawker and its culture for years. Dr. Leung is one of the core members of the Hawker Reload team and he is providing the a brief history of the hawkers.

The distinction between the fixed-pitch and the itinerant hawker license has been started since 1921. Originally, detailed and official regulations have been assigned to cooked-food stall only. Most of the time, the government has just regulated the depth, the width and height of the general stalls only but not its interior design and storage methods. In 1960s, the government suggested and built several prototypes for cooked-food stalls at the Central Market once and implemented several operation experiments in the Sham Shui Po area. In daily operation, the responsible bodies have also adopted a flexible manner in allowing the hawker stall to expand its operation area a bit larger according to the real situations on every different street. On Mar 2013, the government has issued the latest updated specification of the outlook and materials of the fixed-pitch stalls but still without a tight control on the hawker-stall design.

Why is public engagement so important for this project?

Although the fixed-pitch stall design on street has been regulated by the authority all over the years, the hawker licensees and the embedded communities have got their own accommodation, innovation and adaptation in their daily operation organically. The stalls are actually kind of street furniture capturing public attention and providing practical usage in the local community. More importantly, public engagement to allow citizen's or citizen group's participation is important nowadays as complex social problems always get involved of different stakeholders who may be affected by policy outcomes both directly or indirectly.

Questionnaire from Ah Chung, Dr. Leung Chi Yuen(Social Scientist, Lecturer of Hong Kong Polytechnic University Department of Social Science, Hawker Reload Investigator)

Q: What does Hawker stalls mean to HK?

A: It is a cultural artifact which has represented the unique local and community culture

#### Q: What does Hawker stalls mean to you?

A:The stalls looks like a wardrobe sitting on the streets and hiding lots of history and mystery

Q: What do you think about the Hawkers' working environment now?

A: The hawker communities are developing alongside the mainstream economic systems as a declining informal economic sector.

Q: Please name one of the imperative improvement for the current Hawker stalls?

A: The current hawker stall has taken into account the communication between the hawkers, the customers and the community

people and the surrounding environments.

Q: Why are Hawker stalls important for a cosmopolitan such as HK?

A: As a spectator reflecting on the local culture, this specific street furniture has signified the local and grassroots retailing facilities in HK

Q: What does social innovation means to you?

A: Social innovation stands for the solution or reaction to social problems by innovative, local and creative means without border

Q: What is the most memorable moment for you over the last 6 months project period?

A: The heavy rain storm on the street every time we arrived Fa Yuen Street

Q: What have you gained in this project?

A: The hawkers do get their unique social role in the communities and they are the experts of their business and everyday life.

# 04 Government Policy to Hawkers

Traditionally, the law governing the hawker operation was not aiming towards the hawkwer stalls' fire safety but they were there for food and hygiene reasons. Hawker policies were thus never viewed at holistically but the governing of hawker's operation were in piece-meal. Rodent and hygiene issues were the greatest concerns The government policies towards the Hawkers were increasingly stringent after the fire of Fa Yuen Street and the enforcements are mainly restricting the boundary of the hawker operation. Thus Every hawkers must be operating within a prescribed "yellow box". The new dimension of the hawker stand foot print must be exceed 4'ft X 3'ft. Hawker stalls are not static and they will expand during the day time. The main criticisms of these stringent polices is about the ease of the operation for the hawkers. Based on the survey on thirty hawker stands that we have conducted on Fa Yuen Street, the average age of the operators is fifty-six. The oldest interviewed hawker is seventy-six years old.

Ah Chung(Dr. Leung Chi Yuen) of the Social Science department have conduct the researches on hawker and its culture for years. Dr. Leung is one of the core members of the Hawker Reload team and he is providing the a brief history of the hawkers.

## 05 Summoning the Hawker Reload Research Team

One of the innovation for the Hong Kong Polytechnic University the cross disciplinary nature of this project.

The school have initiated the project when they have learned about our earlier participations in the Hawerama exhibitions and events where they were instigated by Kacey Wong(the curator), Leung Chi Yuen(advisor) and Manfred Yuen(one the exhibitors). Kacey Wong was first approached by Alex Wai, the Vice President (Research Development) of The Hong Kong Polytechnic University, to formulate a team for the research project.

Leung Chi Yuen were then scouted as one of the "investigators" of the project. With Dr. Leung's social science background, his earlier research with the hawker's policies and his connection with the Fa Yuen Street community, his presence is vital.

Then, the team will be needing an organizer and a "designer"; someone who have organization skills and yet someone who believed in conservations of local culture. As an architect and a visiting lecturer in the School of design, I was then approached by Kacey Wong to be leading the design and the coordination of the project. I was also responsible for the instigating the internal meetings, which was a colossus task when one have to coordinate the itinerary of academic staffs among the school whom will have different teaching time. Moreover, meeting premise sourcing was also a great issue at the time: the School of Design were also undergoing our migration from the old building at Core A to the Innovation Tower amid the chaos of in the school.

Mr. Edgar Pang from the Department of Building Service Engineering and Mr. Edward Lo from the Department of the Electrical Engineering were both recommended by Alex Wai to join our task force. Such cross disciplined collaboration for the conservation of an unique Hong Kong culture were unprecedented within our university. The team is taking shape and we are excited. We may now begin the project by identifying its the objectives.

Then, we came across with a great problem: how should the project be funded?

At the time when we have initiated the Hawker research project, the Jockey Club Design Institute for Social Innovation (JCDISI) was a newly founded attachment of the Hong Kong Polytechnic School of Design that will be focusing on how design and designers may contribute to the society(at least this is my own interpretation to Social Innovation!). We approached Alvin Yip, the newly appointed director of JCDISI for the possibility of collaboration. Alvin Yip, a celebrity among the designers circle, a professor of the School of Design, a friend and true innovator, agreed to the proposal without hesitations.

Our team have grown from three to six people, but frankly, it is a "top-heavy" team. After a recruitment exercise, we have quickly

scouted Patrick Wong and Choi Ka Yi as the research assistants for the project. Patrick has an architectural background and Ka Yi has an social science background. We believed that their involvement will allow our visions to be implemented, and we were right; without their presences and dedication, we may not be able execute large part of our visions, which is social engagement.

Large part of our project were "field works", that was to collect the information from the users and to apply the researched data to formulate the design solution. Patrick and Ka Yi were energetic, humble and experienced with engaging the Fa Yuen Street community. We have had met with two hundred hawker stalls on Fa Yuen Street it is the only way to gain the trust from the community before we may listen to their real needs.

Hinz Pak from JCDISI is instrumental for the success of the project not only because of his organizational skills; he have introduced an unusual facet to an academic research project we have yet to discover, which is branding and graphic design. On one level, graphic communication have been vital to the success on some of the projects that we have studied which involve social engagements because graphic material are visual and they are easier to be understood and thus convey the message to the a mass public. Secondly, the project needed a "brand"; a friendly face that may allow the academic project to be approachable and recognizable.

Thus, with a unusually collection of engineers, architects, brand builders and social scientist, an unorthodox design approach (social engagements), and an will to strengthen our team's identity, are we moving closer toward success or an unknown abyss?

### 06 Connecting to Public

Our first meeting was held at 10:00am, on 18 January 2013, in a small and windowless meeting room in the Polytechnic University School of Design. We were all sitting shoulder to shoulder and we were all wondering how we may approach the project.

None of us have worked on a cross disciplinary project before, but at the end of the meeting, we have identified two main objectives:

1) Understanding the present: to formulate a data bank for the different typologies of hawker stands' and how they are distributed along Fa Yuen Street.

2) Envisaging a future: to provide a blueprint of a hawker stand system which the local may adapt if they wish to improve on their hawker stalls

We have also divided ourselves into four teams: Edward will be responsible for the investigation of the hawker stall's electrical safety issues. Edgar will be responsible for the fire safety aspect(which is the hot potato), Patrick, Ka Yi and I will be responsible for the research and design aspect. Hinz will be responsible for the branding, logo and publication design; he will be acting as our communication officer.

Why have we identified communication as such an important element of the project?

We need the public to be on our side such that we may be at a better position to conduct the research. The hawker community at Fa Yuen Street is an enclosed community and it is a community that is no stranger to dubious questionnaires from estate developers and the food an hygiene department. Skepticism is perhaps the greatest hurdle(but one that we have sailed through) we must over-come before we may conduct effective research and interviews.

We have voted for a project name: Hawker Reload. It is a "reload" project because it encapsulated the essence of our project, which is n attempt to revitalize/restore one of our most significant civic symbols. Hawker Reload is also a simple statement; simplicity is important for us to communicate our project intent to the mass public.

After the genesis of our project title, Hinz have designed a logo for us. We have chosen the color carefully so that on one hand it may echo the color of the existing market environment and on the other hand, the color chosen consist of only four primarily color such that they shall be easily recognized, and remembered. Idea wise, the logo is frankly about fun; because shopping in the market is simply, more fun.

We have also applied the logo onto a T-shirt that we would wear when we are conducting the on-site research: we are doing much to diffuse the potential skepticism from the hawkers.

A facebook page is created to collated the information, photos and interviews responses such that the data collected and information exchange could be visual, flamboyant, and realistic. A facebook/social media page is necessary for us to collate the information and thoughts from the public.

There was an intense discussion of the size of the leaflet that will be distributed to the locals and the public. We were then faced with a even more fundamental question: do we need leaflets? Would people read them?

We were holding this discussion over Chinese new year(February 2013) and we need to announce our "arrival" and our "good-will" to the public of Fa Yuen Street and we were thinking of how the hawkers will be overloaded with leaflets, hand-outs, "Fai Chun"(揮春) etc. from different social groups and political parties. After all, Fa Yuen Street is one of the hot-spots for political lobbyists as many of the locals at Mong Kok and Fa Yuen streets are voters. Thus, we have decided to delay our first visit to Fa Yuen Street and spare ourselves with more time on the design of the leaflet which must be concise, graphical, written in Chinese, and it must highlight our role as an university researchers. The size of the leaflet should be A2, should that it may treated as a newspaper but not a disposable postcard. The font size should be no less than size 14 printed on A4 piece of paper so that everyone at all age may be able to read every single words. In short, we have spent a lot of time on the details of our communication material

Questionnaire from Hinz Pak (Associate of the Jockey Club Design Institute of Social Innovation, Hong Kong Polytechnic University)

Q: What does Hawker stalls mean to HK?

- A: Tiny, flexible and green shopping unit
- Q: What does Hawker stalls mean to you?
- A: Friendly personal small shops
- Q: What do you think about the Hawkers' working environment now?
- A: Getting difficult than before and less flexible in terms of operations, more limitation

Q: Please name one of the imperative improvement for the current Hawker stalls?

A: Lighter doors

Q: Why are Hawker stalls important for a cosmopolitan such as HK?

A: It's the trademark of local community. It signifies the dynamicity of a truly cosmopolitan city should have.

Q: What does social innovation means to you?

A: It means looking at opportunities and solving problems from dynamic angles with a bottom up and participatory approach leading to social goods.

Q: What is the most memorable moment for you over the last 6 months project period?

A: Fire test, which set the ground of the whole project

Q:What have you gained in this project?

A: Learning to solve social problem from different perspectives, solutions and ideas might not be provided just from experts and professionals. All stakeholders or users advices should be heard and considered.

# 07 Hawker Street Condition Analysis and Comparison

#### The fire

The Government have issued a document in 2012, which served as the Government's first official response to the Fa Yuen Street fire tragedy since 2010. Within the document. The may be divided into two main aspects: a) suggesting the material change of the individual hawker stalls(micro scale) and b) the planning of the future outdoor street markets(urban scale). Our first objective analysis these two plans and to assess their impacts toward the urban fabric and most important of all, the livelihood of the Hawkers. We felt that the urban scale impact assessments may be carried out simultaneously with the micro-scale hawker stall improvement studies.

Fa Yuen Street fire tragedy happened in the evening when the commercial activities on Fa Yuen Street have subsided. After the operational hours, it was usual for the stalls' owner to pack their stalls with their goods. Thus, the "fire-load" of these hawker stalls are higher; meaning that these stall are more prune for catching fire as they are no longer manned or monitored in the evening. It is worth noting that a large majority(more than fifty percent) of the stalls on Fa Yuen Street textile goods vendors(cotton clothes, bed sheets, synthetic fabric lingerie etc., all very flammable). Unlike traditional buildings, none of these hawker stalls are simulated with a fire test to see how fire would spread within hawker stalls and on a market scenario(and how to extinguish the fire!). Unlike buildings, dwellers of a street market have never experienced a fire drill. Until 2010, no-one would, associate a fire in a Hong Kong market scenario.

Thus, when the accident happened, no one may accurate depict under which circumstance have the fire started. Was the fire an accident or was it man-made? Most important of all, the fire brigade have not experience such fire, the fire truck have found difficulty locating the fire when the people reporting the fire may not accurately pin-point the location of the accident. The fire brigade may mot move into the market as quickly as they could have done so. The fire trucks may not enter the heart of the Fa Yuen Street and the hawker stalls were obstacles to the fire fighters.

The accident claimed the lives of nine people and have injured thirty-four people. The fire fight have mobiles over two hundred fire fighters.

On 1<sup>st</sup> December 2011, over a thousand fire fighters have demonstrated on the street for the reduction of the duty hours from fifty four hours to forty eight hours per week.

It was worth noting that in year 2010, fifty hawker stalls were burned to the ground in the same street, injuring six people. Two accidents within two years: it was time that the Government must intervene.

Thus, immediately after the accident and even to some, until now, in the eyes' of many, the "solution" to "Fa Yuen Street" was the investigation of a monolithic solution which could "solve" the fire hazard issue once-and-for-all, and the solution is a scientific one. This "problem solving" mind-set could be apprehended as the immediate reaction to the fire and the subsequent chains of events; it is a fresh wound and one must "first stop the bleeding". Yet, it is the aim of this project to flesh out how the Fa Yuen Street improvement program must be a multi-faceted investigation which would involve a team of multi disciplinary expertise.

#### Aftermath and "suggestions" by the government

The report by the Government and the Fire department believed that cause of the fire was short circuiting of one of the circuit boards on one of the Hawker Stalls and the main attribute towards the death of the victims were the blocked means of escape from the aged tenement housings facing Fa Yuen Street; thus, the adjacency of the Hawker Stalls and the tenement housings.

The Government have listed a plan of egress for the occupants of the adjacent Fa Yuen Street tenement housings: it had suggested that a six meter radius "clearance" area that will be segregating the buildings' exit from the Hawker stalls to serve as a the buffer. This plan simply implied that a number of Hawker stall must therefore be relocated or eradicated.

We wish to assess the impact of this plan and the number of hawker stalls that will be affected. First, we have surveyed Fa Yuen Street by marking the numbers of hawker stalls and registering their uses(whether the stalls are "dry goods" or "wet goods" venders). Three of us have put on our newly designed uniform and moved into Fa Yuen Street each with a pen and a paper in our hands. We started counting. At the end of the survey, we have registered a total of two hundred and twenty Hawker stalls along Fa Yuen Street, of which twenty-three "wet goods" venders(venders that are selling fruits or flowers) and one hundred and ninety seven "dry goods" venders.

Secondly, we have surveyed and marked the location and number of entrances of the tenement housings along Fa Yuen Street. We have taken photographs of each tenement housings' entrances and their street numbers. Such survey were never conducted with such detail. With these information, we have over-lay the satellite image and the Building Survey Plan that we have acquired from the Building Department of Hong Kong and we were able to produce an accurate three-dimensional computer model of Fa Yuen Street that have illustrated the exact locations of the tenement housings and the hawker stands. With this three-dimensional computer model of Fa Yuen Street, we are able to assess the numbers of Hawker stalls that will be affected by the relocation plan. The assessment result was shocking: if the "6m radius clearance" strategy was adopted, one-hundred and fifty four hawker stalls out of two-hundred and twenty stalls are to be removed from that site; that is seventy percent of the hawker stalls on Fa Yuen Street!

As an experiment and a comparison study, we have surveyed Tai Yuen Street, which is a well-known Hawker stall market street on Wanchai; representing the archetype of traditional out-door market on Hong Kong Island. Similarly, out of the original one hundred and forty two Hawker stalls,, fourth-three of which will have to be removed, which is thirty percent of the existing number of Hawker stalls Tai Yuen Street. Although the number is not as dramatic as the result we have received from Fa Yuen Street, it is still a large number. And the reason for the drop of number is mainly contributed by the drop of the numbers of the adjacent Buildings and thus a drop of number for the exits. Most buildings on Tai Yuen Street are not tenement housings but modern apartments thus it had reflected a different density.

The Government have another proposal: what if all of the Hawker Stalls are not flammable? If the Hawker stalls are fitted with fire insulting material such as thicker metals sheet or plaster boards, and assuming that the hawker stalls are treated as individual buildings, could we relax the clearance distance between the hawker stalls and the adjacent buildings' fire exits? We have ran the simulation with another clearance radius, one-and-a-half meters on both Fa Yuen Street. Obviously the situation have improved dramatically; eighty-six percent of the existing hawker stalls may remained, but this would inflict another issue: how could the Government enforce the Hawker stall owners to up-grade their stalls with a new material? How much would it cost, what would be the appropriate material?

# 08 Categorization to Hawkers

Through-out our site survey, we have realized the importance of acquiring the full understanding of the hawker activities along Fa Yuen Street before we may propose a new design for the hawkers.

Within the Government current registry, the hawkers' trades may only fall into two main categories only: "Dry-Goods" or "Wet-Goods" venders. The distribution of the "Dry-Goods" or "Wet-Goods" venders various on different street markets, for example: on both Fa Yuen Street and Tai Yuen street, a majority hawkers are "Dry-Goods" venders(eighty-nine percent). Many families with lower income may visit Tai Yuen street and Fa Yuen Street for their boutiques shopping and some of the "good-mix" inventory are very interesting: some stalls would specialize in children wears while others would specialize in night gowns such as pajamas. There are also the trendy goods: hang bags, portable phone cases, swimsuits. Most of the hawker stalls are

highly specialized in a few trade goods. Thus, Fa Yuen Street is a shopping mall, except that it is outdoor. A shopping mall is only popular when it is offering a variety of goods and similar to shopping arcades, different good venders are doing its part fort the prosperity of this outdoor shopping mall; each of the stalls are sponsoring the welfare of the other stalls.

Every different hawker and their trade would require a unique display system of goods that is specific to their needs, which explain why an universally adaptable "prototype" hawker stall is highly idealized. The real-life situation is that the hawker stalls in Hong Kong are all unique and tailor-made for each individual hawker. The stalls may all have the same appearance from far, but when they are observed closely, one would discover the ingenuity and the characteristics of the hawker stall owners: the ergonomic, the trade that they in, their age etc.

Despite the uniqueness of each hawker stalls, they can be generalized and categorized; thus providing us with the "footing" for establishing a general design system. So far, we have understand that we are not providing a prototype, one-fit-all solution, nor we are claiming that all hawker stall design should be tailor made. We do know that we will be design a system of design. Perhaps each hawker stall is comprised by a few components that we have pre-designed and it is up to the individual hawker to select which of the components to be assembled are best fitting their business nature and their ergonomic needs.

# **09 Public Engagement**

We are not designing for the an individual but a group of people, and this is the reason why we must collate the opinion from as many target users as possible.

Traditional questionnaires are, most of the time, very effective mean to collate information. Nonetheless we are situated within a very different context for the Fa Yuen Street project. The truth is not many hawkers find it difficult to articulate their opinion and wishes for the improve of the work space in words. Fa Yuen Street is a close community where hawkers have acquired their right for operation from their parents. Community sense is strong; everybody knows everybody.

Dr. Leung and Choi Ka Yi are instrumental for the success of this project before without their introduction to the hawker community, it is almost impossible to acquire the real opinion from the hawkers. Dr. Leung and Ka Yi are both social scientists who have worked with Fa Yuen Street community for many years and have established close connection with the community leaders of the area. With the support of the trade union's leaders, our works had been much more easier(and safer).

It is worth noting that we have spend eight months of our project period for the public engagements and data collection and only three months on concluding the design resolution.

So how did we spent these eight months on-site research period?

- We have visited each of the two hundred and twenty three hawker stalls along Fa Yuen Street and have explained to each of the hawker our intention("we came in peace...")
- We have had meetings, presentations, interviews with the trade union leaders, hawkers' representatives, the Government's Food and Hygiene Bureau representatives; collecting opinions and views first handedly.
- We have set up a paper stall on Fa Yuen Street to collection ad-hoc opinion from the locals.
- We have attended government public hearings and on hawker policies.
- We have selected sixteen hawker stalls for more thorough interviews and we have conducted much more thorough measured drawings of their stalls. Each of these selected hawker stalls are photographed with standardized distances, viewing angles, camera and weather conditions, such that we may analysis the hawker stall typologies by a fair comparisons. These photographs are not only valuable to the project but they may also serve as the record of a fragment of our unique heritage.

Questionnaire from Patrick Wong (Hawker Reload Research Assistant, Jockey Club Design Institute of Social Innovation, Hong Kong Polytechnic University)

- Q: What does Hawker stalls mean to HK?
- A: A kind of special local culture with local characteristics.
- Q: What does Hawker stalls mean to you?
- A: A very convenient place to buy relatively low end products and to practice my bargaining skills.

#### Q: What do you think about the Hawkers' working environment now?

A: A very tough environment and not very disorganized, which sometime give raise to safety hazards (speically when it is very crowded)

Q: Please name one of the imperative improvement for the current Hawker stalls?

A: Make it more organized in a way at least to avoid major safety problem.

Q: Why are Hawker stalls important for a cosmopolitan such as HK?

A: A type of local culture, local style.

- Q: What does social innovation means to you?
- A: Sorry, still I cannot answer this.
- Q: What is the most memorable moment for you over the last 6 months project period?
- A: The fire test.
- Q: What have you gained in this project?
- A: The thoughtfulness of other professionals inspired me a lot.

# **10 Main Concern of Hawkers**

From the interviews, observations, and questionnaires that we have collated for eight months, we may conclude that these are the main concerns of the Hawkers and their imperative needs for the improvement of their work space. Almost all of the interviewed hawkers have expressed these concerns:

#### On operations

- The grueling effort for popping-up the stall at the morning and packing-up the stall at the evening. This process may take an average of forty five minute for a younger hawker operator but the time required may be doubled for an aging hawker(the average age of the interviewed hawker operators is fifty seven years old).
- An easily retractable top for the raining days. At the moment, due to the fire department's requirement, the a permanent roof of the hawker stalls may not extend beyond a boundary indicated on the street with a yellow line so that the street would be clear for the unlikely entry of an fire truck if there is a fire. Nonetheless, the fire department would tolerate the erection of temporary umbrella during a raining day but the erection and the dismantling of the umbrella is no easy task for an aging hawker.

#### On Safety

Electrical safety

#### On the future

- The future relocation plans: "Will I be able to operate at the same area? Or would I be relocated to Tin Shui Wai?".
- If there is a relocation plan, who will be moving? Will the decision be made by a lucky-draw?

Surprisingly, none of the hawkers are concern with the fire safety of the stalls!

# 11 Design for Hawkers (Our hawker stand design)

As a conclusion, we have summoned the following four objectives for the Hawker Reload project. We cannot avoid the fire safety issue though!:

- To provide an easily retractable top for the hawker stalls.
- To improve the business operating environment for the operators by offering different goods' display systems.

- To improve the fire and electrical safety of the hawker stalls.
- To ease the "popping and packing" pain for the aging and physically weak hawkers.

#### How did we address these objectives?

• An easily retractable top for the hawker stalls.

We suggested to fix another top that is made out of corrugated metal on the existing top with two sliding tracks. This simple connection will allow the retractable top to be easily extended and retracted. The maintenance required for such system is minimal because the mechanics that is binding the additional tops to the parent structure is minimal.

- Fire and electrical safety of the hawker stalls
  1.5mm galvanized steel sheets suggested by the government are applied as the cladding for the new stalls.
- To ease the "popping and packing" pain for the aging and physically weak hawkers.
   The weight of the structure and the detachable doors are much heavier thus our new design systems will minimize the number of detachable doors. Doors are mostly hinged and additional support for the doors are provide by castors. Thus, unfolding these doors will be effortless.

Display shelves and tables are separate entities and they could be wheeled into the parent structure entirely.

To improve the business operating environment for the operators by offering different goods' display systems.
 We have provided a matrix of designs that will be responding to different three site conditions(single aspect, double aspects and quadruple aspects) and three typologies(type A-with display tables, in which the doors become the display tables, type B-with full height display shelves and type C-with trolleys). The design is therefore a mixture of designs and they will be displayed on a "menu" which the hawker may choose from.

This image illustrated the retractable roof design

This image illustrated the matrix of designs for the hawker owners to "mix-and-match" for their ideal hawker stall New hawker stall in the making. We have made 4 for the experiment and the fire test.

Each hawker stall can divided into 3 parts: the top, the body and the shelves. Hawker may choose from the 4 types of body and shelves that bet fit their stall's situation.

### 12 Electrical Safety Concern

The improvement of the electrical safety of the hawker stalls is one of the prime objectives of the project.

One of the suspected causes of the fire was "probably caused by short circuits near the electricity boxes at stall 268, where an electrician had used aluminum cables to extend CLP Power's copper cables when he moved the boxes inside". (quote from South China Morning Post print edition as Fa Yuen Street fire deaths accidental, Tuesday, 19 March, 2013, 12:00am).

None of us may better describe our works on the hawker stalls electrical safety improvement than Mr. Edward Lo, one of our investigator and collaborator.

Questionnaire from Edward Lo (Senior Lecturer, Hong Kong Polytechnic University Department of Electrical Engineering, Hawker Reload investigator)

Q: What are the most important electrical safety improvements that are needed immediately?

A:

1. The arrangement of the wires and appliances. Very often they are too loosely hanged around, hence they can be damaged easily or water leakage may easy entering them.

2. Usually each fixed socket is overloaded by many plugs on it.

3. The original electrical installations were likely altered by the hawkers themselves/unskilled workers without consulting professionals.

Q: What is the relationship between electrical and fire safety within the Fa Yuen Street context?

A: Damaged cables or overloaded sockets/cables may easily lead to fire.

Q: What are the major electrical safety risks which the existing Hawker stalls need to tackle?

A: Fix all the wire and appliances properly and avoid overloading of sockets. We should try to reduce the number of plugs on one single socket.

Q: What are you proposing to improve the electrical safety of the future Hawker stalls?

A: In addition to those points listed in answer of the question below (the new specifications), there are other possible long term improvements:

1. Provision of low voltage DC supplies (say 5V, 12V and 50V in addition to the traditional AC 220V), now many "small appliances" (such as LED lights, mobile phone chargers, digital camera charges, small fans, etc.) actually work at 5V or 12V DC. Lower supply voltages reduce the hazard of electric shocks and breaking down of electrical insulation.

2. More regular mandatory checks on electrical installations of this type by some special units in government or power utilities. But this has long term financial implications and coordination problems.

Q: How may the new specification of the electric standard alleviate the existing Hawker stalls to from the fire?

A:

1. The sizes and protection (the fire resistant insulations, the metallic conduits, fire resistant paints) of the proposed cable should be able to carry all reasonable loads and protect them from damages easily.

2. Provision of more sockets to reduce the possibility of using too many socket adapters or sockets bars.

3. The provision of the two-part format (one for overnight load, one for the other loads) can conveniently reduce the amount of load at the night time.

4. Specifying the requirement of IP coded enclosures to reduce the chance of water leakages into electric circuits.

5. Provision of an O & M manual to remind them key points in operation and maintenance aspects.

### 13 Improvement for the hawkers and the community

Fa Yuen Street had formed a community which where it may be self governing. In addition to the improvement suggestions that we have made, here are some other suggestions that we have consider which may improve the fire safety of the market. After all, fire safety concerns are the triggers for this project:

- To install CCTVs with heat tracking sensors so that they may detect fire threats during the evening. An obvious question for such establishments is who monitors them? Would it be the community members or the government?
- 2) Distributing hand held fire extinguishers equally along the Fa Yuen Street.
- 3) If the Government wishes to enforce the plan to establish the 1.5m radius clearance are between the adjacent buildings and the hawker stalls would entail the relocation of the hawker stalls, and the Fa Yuen Street hawkers are extremely reluctant to do. We have attempt to simulate the situation with the aid of computer modeling and we have investigate the possibility to confine the relocation within the Fa Yuen Street neighborhood by suggesting that some of the stalls are to be moved on Bute Street, which is an equally busy street with high pedestrian traffic.

### 14 The Future of Hawkers

We felt that the design of the hawker stalls are only the beginning of the series of changes for the community of Fa Yuen Street.

Our design strategy may be shared with the public and the local contractors. The hawkers may approach the contractors directly and pick their ideal designs locally. So as he our impact analysis of the Government's strategy to improve the egress of adjacent buildings; it is serving as the reference for the government as a graphical reference.

It was never our intention to plan the future of the hawker community as we are true believers that the hawker culture development may only occur organically. On a micro scale, we must understand that the hawker stalls are not static objects are they are transforming according to the hawker and they are manifestations of the hawker's business Our design approach would allow the hawkers to appropriate the design around their needs(display needs, ergonomic needs etc). On an urban/macro level, a more flexible and transformable hawker stall will benefit the hawkers(the user) and their management team(the Food and Hygiene Bureau) because most of the flexible and detachable elements of the stalls may be collapsed within the parent stall structure. The easily retractable roof ay replace the clumsy umbrellas and they may form a gallery of veranda for the customers during the rainy days.

Our hawker stalls design went through a series of fire test and the new design and with the thicker material for the cladding, proved to be effective in delaying the fire spread if one of the hawker stalls catches fire. Our design guideline have also offered solutions to enhance the electricity safety of the hawker stalls.

Tourism is no doubt a great driver for the development cities and the conservation of heritages. During our visit to Fa Yuen Street, we have met with many tourists who was attracted by the charm of Fa Yuen Street as it is galvanizing the unique culture of Hong Kong and Mong Kok. It will require a government administration both courage and vision to promote its markets as a tourist attractions.

# **15 Some Other Grand Recommendations**

We have asked the 35 second year Hong Kong Polytechnic University, School of Design students to come up with innovative ideas on the future hawker stalls(in 10 years time, what will hawker stalls be?). After a two month period, a few visionary and yet realistic ideas were generated and these are the topics of some of the selected works:

- 1) A magic show kiosk
- 2) A mobile politician centre
- 3) A mobile gym/fitness testing centre
- 4) A mini bar/pub
- 5) A beauty centre
- 6) A boutique

Most of the students have forecasted that the future enterprises that will be establishing their business on the hawker stalls are ones that are extending the offices spaces into the heart of the city. The hawker stalls are intrinsically mobile and some of the students have formed that concept by harvesting the mobility that hawker stalls are offering.

We have learning from the past to see the future. It is a brave new world.