RGC Ref. No.: UGC/FDS15/H12/14 (please insert ref. above)

### RESEARCH GRANTS COUNCIL COMPETITIVE RESEARCH FUNDING SCHEMES FOR THE LOCAL SELF-FINANCING DEGREE SECTOR

#### FACULTY DEVELOPMENT SCHEME (FDS)

#### **Completion Report**

(for completed projects only)

- Submission Deadlines: 1. Auditor's report with unspent balance, if any: within six months of the approved project completion date.
  - 2. Completion report: within 12 months of the approved project completion date.

# **Part A:** The Project and Investigator(s)

#### 1. Project Title

Risk yet to be socially realized: Light pollution in Hong Kong

# 2. Investigator(s) And Academic Department(s) / Unit(s) Involved

| Research Team          | Name / Post                         | Unit / Department / Institution                  |
|------------------------|-------------------------------------|--|
| Principal Investigator | Lam Yee Man/ Assistant<br>Professor | Department of English<br>Language and Literature |
| Co-Investigator(s)     | N/A                                 | N/A  |
| Others                 | N/A                                 | N/A  |

#### 3. Project Duration

|  | Original         | Revised | Date of RGC / Institution Approval (must be quoted) |
|--|------------------|---------|---|
| Project Start Date                           | 1 January 2015   | N/A     | N/A   |
| Project Completion Date                      | 31 December 2017 | N/A     | N/A   |
| Duration (in month)                          | 36 months        | N/A     | N/A   |
| Deadline for Submission of Completion Report | 31 December 2018 | N/A     | N/A   |

1

FDS8 (Apr 2017)

### Part B: The Final Report

# 5. Project Objectives

- 5.1 Objectives as per original application
  - 1. To investigate the emergence of light pollution in Hong Kong
  - 2. To investigate the government's discourse on light pollution
  - 3. To investigate the public discourse on light pollution (including NGOs and other advocates)
  - 4. To investigate cultural meanings of light and lighting
  - 5. To investigate the social constructions of light pollution in Hong Kong
  - 6. To suggest how light pollution failed to be realized as a risk in Hong Kong
  - 7. To suggest how the issue could be brought forth in the future.

| 5.2 | Revised | obj | ectives |
|-----|---------|-----|---------|
|-----|---------|-----|---------|

| Date of approval from the RGC: | N/A |
|--------------------------------|-----|
| Reasons for the change:        | N/A |
|                                |     |
| 1.                             |     |
| 2.                             |     |
| 3                              |     |

#### 5.3 Realisation of the objectives

(Maximum 1 page; please state how and to what extent the project objectives have been achieved; give reasons for under-achievements and outline attempts to overcome problems, if any)

Most of the objectives have been achieved.

Objective 1) The emergence of light pollution in Hong Kong has been investigated. The problem of light pollution in Hong Kong was first discussed in TV programs in the 2000s, but it was not until the late 2000s and 2010s that it received more public attentions. Different organizations and citizens have tried to raise the issues through different means, including filing complaints and organizing campaigns.

Objective 2) The government's discourse has been investigated. Light pollution was first officially mentioned by the government in the 2008 Policy Address; a task force was established in 2011, a report was published in 2015, a voluntary light pollution charter was issued in 2016. For the government, light pollution is a relatively new problem which cannot be easily defined. The government tends to define light pollution as a problem of light nuisance and energy wastage.

Objective 3) The investigation was completed. Scrutinized from the comments and articles published in the newspapers and many relevant webpages, light pollution is found to be an issue related to: a) light glare; b) light trespass; c) skyglow; d) light clutter; e) health hazard; f) disturbance of nature; g) new lighting technology and design; and h) energy wastage. A difference in discussion's focus is found in Hong Kong's and overseas' light pollution discourses. Whereas emphasis is put more on energy wastage than skyglow and disturbance of nature in Hong Kong's discourse, these components are equally addressed in the discourses overseas, as shown in the cases in Japan, Britain, and the USA.

Objective 4) The investigation was completed. Culturally and historically, lighting technology enables human to be a "creator" and a ruler. Temporally, the emergence of lighting technology empowers human to disrupt and stand against the natural rhythm; to be in fuller control of time. Spatially, different lighting allows human to create space of different kinds; or, to say the least, it marks visually human's habitat. Light also signifies work, productivity, and civilization in many cultural imaginations; in a nutshell, light signifies the triumph of reason. On the contrary, in many cultural imaginations and traditions, darkness represents the unknown, the irrational, or even a halt; darkness is relatively undesirable and hence expelling darkness is very often regarded as a victory and an achievement.

Objective 5) The investigation was completed. Light pollution, as a social problem, is blended with subjectiveness and objectiveness. The identification of light pollution is partly grounded on one's feeling and emotion (e.g. one feels "itchy" because of the light, one finds the light "annoying", as suggested in light pollution complaints and debates). However, as this subjective sentimental feeling has very often been regarded as a flaw, light pollution in its social realization seeks authority from "reason". Light pollution is presented as fact; personal experience has been turned into numbers. Light pollution is represented as a risk in its most objective way: a distanced risk which will not trigger human's emotion and anxiety. Highlighted in the representation is nothing but disengagement. But it is this cut-off, that human disregards one's connection with the environment, that we fail to see how light has affected the others, which causes light pollution.

Objective 6 and 7) The investigations are completed. Analysis is about to be completed by the journal articles under preparation. For major findings see Section 6.1

# 5.4 Summary of objectives addressed to date

| Objectives (as per 5.1/5.2 above)   | Addressed (please tick) | Percentage Achieved (please estimate) |
|---|-------------------------|---------------------------------------|
| 1. To investigate the emergence of light pollution in Hong Kong                               | <b>✓</b>                | 100%                                  |
| 2. To investigate the government's discourse on light pollution                               | <b>√</b>                | 100%                                  |
| 3. To investigate the public discourse on light pollution(including NGOs and other advocates) | ✓                       | 100%                                  |
| 4. To investigate cultural meanings of light and lighting                                     | <b>✓</b>                | 100%                                  |
| 5. To investigate the social constructions of light pollution in Hong Kong                    | ✓                       | 100%                                  |
| 6. To suggest how light pollution failed to be realized as a risk in Hong Kong                | <b>✓</b>                | 90%                                   |
| 7. To suggest how the issue could be brought forth in the future.                             | <b>✓</b>                | 90%                                   |

#### 6. Research Outcome

6.1 Major findings and research outcome (Maximum 1 page; please make reference to Part C where necessary)

Major findings can be summarized three:

- 1) The research would suggest that light pollution is "not" pollution. After studying a rich set of materials, the research suggests that, in its realization, light pollution is different from other pollutions. Unlike air pollution whose realization is very clear— almost without doubt, air pollution is represented as a cause of health hazard and economic loss, in its social realization light pollution is rather obscure; there are quarrels and disagreements in their manifestations. If pollution means matter out of place, whether light is out of place could be contextual and subjective. For instance, whether Christmas lighting is manifesting festival spirit, or is a nuisance, is highly subjected to one's perception and its specific temporal and geographical context; whether light is a nuisance is, sometimes, debatable, and very often, contextual. Light being linked intimately with consumerism and postmodernity also makes filing a personal light pollution complaint "difficult", and the complaint may, at some point, seem scattering and "trivial". To present the problem in an "objective" and "important" manner, the green NGOs in Hong Kong have chosen not to use light trespass and light glare, albeit these two are the most common light pollution problems raised as the major rationales against light pollution in Hong Kong. In the green NGOs' discourse, instead of being introduced as a cause of discomfort or a nuisance, light pollution has been redefined as a problem of energy wastage; that now light pollution is not an individual problem, but covertly directed to the problem of air pollution (the unnecessary use of electricity pollutes the air), pointed to the widely accepted and recognized problem of global warming.
- 2) The research suggests that this realization and definition of light pollution is not without its drawbacks and consequences. First, while air pollutant has been commonly recognized as risk, light as risk is not fully realized in this regard. Second, light pollution's obscure and rather distanced relation with global warming is most problematical—apparently mere acceptance of global warming as an environmental problem does not suffice to bring about drastic and revolutionary changes in a society. Previous studies on ecocriticism have already suggested that global warming is such a huge problem that it is beyond our perception and comprehension, resulting in citizen's continuation of their usual quotidian lives. This distanced relationship and feeling also reproduces and reinforces a sense of alienation, which has long been regarded by ecofeminism as one of the major causes of contemporary environmental crises. In a nutshell, light pollution, for some, it is a nuisance; for many, it signifies joy and hope, or it may be a big but distanced and vague problem, the same with global warming.
- 3) The research would also suggest how the issue can be further brought forth. Taken into consideration the lesson of light pollution's realization in Hong Kong, the research would suggest how the international campaign "Earth Hour" can be further reformed in the future, what the PI will call, Earth Hour 2.0. Although light pollution is not addressed in any sense in "Earth Hour", it is related to light pollution in the practical level. The research would suggest that the new Earth Hour, supported by ecocriticism theories, should facilitate a paradigm shift—the light-off activity should serve more than a pure symbol against global warming; it should encourage the public to embrace darkness and the starry sky in the urban area; it should facilitate the realization of a different mindset. Other than egotistically creating a milieu surrounded by artificial light, one should realize one's connections with the others, be it humans, animals, or stars. The research would suggest that the action of light-diming and an embrace of darkness may just be a doorway to comprehend the issue of global warming on a practical and daily manner.

6.2 Potential for further development of the research and the proposed course of action (Maximum half a page)

The research on light pollution is completed. Seeing that light pollution engages one visually, the PI hopes that, in the future, she can investigate further the relationship between visual culture and global warming.

#### 7. Layman's Summary

(Describe <u>in layman's language</u> the nature, significance and value of the research project, in no more than 200 words)

The problem of light pollution in Hong Kong is unique — given that it is reported to be the worst in the planet, given that light pollution as risk is scientifically proven, light pollution is yet to be socially manifested in Hong Kong. This is where the project contributes. Through examining a rich set of materials and engaging with environmental theories, this project maps out the discourse of light pollution in Hong Kong, identifies the factors hampering the social realization of risk, and suggests how the issue can be further advanced. Significances are manifold. Regionally, it disentangles the confusing disagreements over light pollution; it enhances the understanding of light pollution in Hong Kong; and it spells out the flaws in the current realization strategy. Theoretically, it enriches the study of light pollution with a new humanistic perspective; it sheds new light to the theoretical study of risk and pollution. Globally, the project offers new insights to how environmental campaign, such as Earth Hour, can be further reformed.

#### **Part C: Research Output**

**8.** Peer-Reviewed Journal Publication(s) Arising <u>Directly</u> From This Research Project (Please attach a copy of the publication and/or the letter of acceptance if not yet submitted in the previous progress report(s). All listed publications must acknowledge RGC's funding support by quoting the specific grant reference.)

| The           | The Latest Status of Publications                  |        |                      | Title and<br>Journal /<br>Book                     |   |   |                               |                                       |  |
|---------------|--|--------|----------------------|--|---|---|-------------------------------|---------------------------------------|--|
| Year of       | Year of Acceptance (For paper accepted but not yet | Under  | Under<br>Preparation | Author(s) (denote the corresponding author with an | (with the volume, pages and other necessary publishing details          | Submitted<br>to RGC<br>(indicate the<br>year ending<br>of the<br>relevant<br>progress | Attached<br>to this<br>Report | Acknowledged<br>the Support of<br>RGC | Accessible from the institutional repository |
| Publication 1 | -  | Review | (optional)           | asterisk*)   | specified)  | report)   | (Yes or No)                   | (Yes or No)                           | (Yes or No)                                  |
| 2 40.11041    | <i>y</i>   | Y      | (aprilonius)         | *Lam Yee<br>Man                                    | "Van Gogh's Starry Sky and Earth Hour 2.0" in Environmen tal Humanities | N/A   | Yes                           | Yes                                   | N/A  |
|               |  |        | Y                    | *Lam Yee<br>Man                                    | "Is light pollution pollution?"   | N/A   | No                            | N/A                                   | N/A  |

# 9. Recognized International Conference(s) In Which Paper(s) Related To This Research Project Was / Were Delivered

(Please attach a copy of each conference abstract)

| Month /<br>Year /<br>Place | Title  | Conference Name  | RGC (indicate the year ending of the relevant progress report) | Attached<br>to this<br>Report<br>(Yes or No) | Acknowledged<br>the Support of<br>RGC<br>(Yes or No) | Accessible from the institutional repository (Yes or No) |
|----------------------------|--|--|--|--|--|--|
| 10/2017,<br>London         | "An Ecofeminist<br>Study on Light<br>Pollution's News<br>Representation" | International Conference on Ecocriticism and Environmental Studies | No   | Yes  | Yes  | N/A  |
|                            |  |  |  |  |  |  |

# 10. Whether Research Experience And New Knowledge Has Been Transferred / Has Contributed To Teaching And Learning

(Please elaborate)

This project has inspired the PI to add two new elements to the courses she was teaching.

Two elements, namely, visual culture and environment, were added to the courses ENG 153

Introduction to Cultural Studies and ENG 389 Travel and Culture.

#### 11. Student(s) Trained

(Please attach a copy of the title page of the thesis)

| Name              | Degree Registered for | Date of Registration | Date of Thesis<br>Submission /<br>Graduation |
|-------------------|-----------------------|----------------------|--|
| Ng Wai Lok Elliot | Bachelor              | 1 September 2012     | (Thesis) N/A<br>Graduation 2016              |
|                   |                       |                      |  |
|                   |                       |                      |  |

#### 12. Other Impact

(e.g. award of patents or prizes, collaboration with other research institutions, technology transfer, teaching enhancement, etc.)

N/A

# 13. Public Access Of Completion Report

(Please specify the information, if any, that cannot be provided for public access and give the reasons.)

| Information that Cannot Be<br>Provided for Public Access | Reasons |
|--|---------|
| N/A  |         |

## RESEARCH GRANTS COUNCIL COMPETITIVE RESEARCH FUNDING SCHEMES FOR THE LOCAL SELF-FINANCING DEGREE SECTOR

### **FACULTY DEVELOPMENT SCHEME (FDS)**

### **Completion Report - Attachment**

(for completed projects only)

**RGC Ref. No.:** UGC/FDS15/H12/14

Principal Investigator: Lam Yee Man

**Project Title:** Risk yet to be socially realized: Light pollution in Hong Kong

# **Statistics on Research Outputs**

|   | Peer-revie<br>wed<br>Journal<br>Publication<br>s | Conference<br>Papers | Scholarly Books, Monograph s and Chapters | Patents<br>Awarded | Other Research<br>Outputs<br>(Please specify) |
|---|--|----------------------|---|--------------------|---|
| No. of outputs<br>arising directly<br>from this<br>research<br>project [or<br>conference] | 2<br>(under<br>preparation)                      | 1                    |   |                    |   |