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Environmental Consciousness in Hong Kong

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Abstract

The majority of the public in Hong Kong have repeatedly told pollsters that they believe environmental problems have become very serious in the city. They are, however, at the same time, highly skeptical about the actual degree of concern felt by their neighbors, friends and relatives. Their belief that only they themselves are environmentally conscious but not the others probably stems from the fact that people in Hong Kong tend to, unconsciously, think about the concept of "environment" at several different spatial scales and, unknowingly, switch between these spatial scales in evaluating their own environmental attitudes and behavior and those of other people around them. In the end, their scepticism is further reinforced by, or is a logical extension of, their own mental model of nature, where an emerging social norm on the importance of protecting nature is eclipsed by a fatalistic mood among the public, on the one hand, and the pragmatic concerns of the elite with economics, on the other.

Keywords: environmental consciousness, Hong Kong, cultural models, air pollution, public opinion

Survey results clearly demonstrate that an overwhelming majority of the public in Hong Kong believe that the city's environmental problems are very serious or very urgent [Chan 1993; ECC 1993; 1995; Green Power 1994; 1995; Lee *et al.* 1997]. These survey results, however, do not tell us much about the motivations, and reservations, if any, behind the public's expressed concern for the environment [Barnes 1997; Ng and Ho 1995; Lee 1999; 2002]. In order to improve our understanding of the underlying premises of and major factors in shaping public perceptions on environmental problems, in-depth interviews were conducted by the author with 23 individuals from May through August in 1999. Table 1 presents summary data on the demographic characteristics of the respondents.

Using an interview protocol with open-ended questions, respondents were asked to describe and explain their perceptions of Hong Kong's environmental problems in general as well as their views on one of the leading environmental problems, as defined by the Hong Kong government's current policy thrust—respirable suspended

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Code	Pseudonym	Sex	Age	Education	Household Income (HK\$)	Occupation
H 1	Chiang	М	20s	post-graduate	50k - 60k	senior civil servant
H 2	Lau	Μ	50s	secondary	30k - 40k	secondary school technician
Н3	Tsang	F	19	secondary	40k-50k	secondary school student
H4	Chiu	Μ	40s	university	60k+	secondary school teacher
H 5	Lai	F	50s	secondary	20k-30k	housewife
Η6	Fung	F	20s	secondary	40k-50k	social worker
H7	Lee	М	60s	primary	20k-30k	commercial van driver
H 8	Ting	Μ	30s	post-graduate	60k+	financial comptroller
Н9	Law	М	40s	university	60k+	lawyer
H 10	Siu	F	80s	primary	< 10k	retiree
H 11	Leung	М	50s	primary	40k - 50k	taxi-driver
H 12	Lui	Μ	40s	university	50k - 60k	newspaper editor
H 13	Но	F	20s	university	30k - 40k	newspaper editor
H 14	Tsui	F	50s	secondary	< 10k	housewife
H~15	Yeung	F	30s	primary	< 10k	housewife
H 16	Ma	F	50s	secondary	< 10k	housewife
H 17	Fung	F	30s	secondary	50k-60k	clerical worker
H 18	Ng	Μ	40s	university	60k+	local politician
H 19	Cai	F	30s	secondary	10k-20k	clerical worker
H 20	Tong	F	17	primary	< 10k	student
H 21	Cheung	F	40s	secondary	10k-20k	housewife
H 22	Ching	F	40s	primary	10k-20k	housewife
$\rm H~23$	Mak	Μ	40s	primary	10k-20k	unemployed

Table 1 Profiles of Interviewees

particulates (RSP).

The interviewees' views on human-nature relationship are presented in the next section. In Section II, perceptions on environmental problems in general, as well as their values, beliefs and personal experiences that have helped shape those perceptions, are discussed. In Section III, the respondents' knowledge and their views on the causes, consequences and possible solutions of the respirable suspended particulates issue are examined. The implications of the research findings are discussed in the concluding section.

I Views on Human-Nature Relationship

I-1 How Should People Relate to Nature?

An overwhelming majority of the informants say that there should be "a very close relationship" between people and nature. They believe that the welfare of human beings and that of nature are intertwined, although most of them look upon this interdependent relationship from a largely anthropocentric and utilitarian perspective. A great number of respondents (H 11; H 13; H 17; H 23), mostly lay person, give a succinct and matter-of-

fact view: A good natural environment is desirable because it would lead to good physical health and a good quality of life for people. The elites tend to offer more elaborations. For instance, Mr. Ng (H 18), a local politician in his 40s, states that human beings and nature, the two together, make up "one integrated whole." "The dynamics of the entire natural system involve the human element; and people's activities also have impacts on nature," he affirms. He continues to add that "at a minimum, there should be a kind of balance achieved and maintained in the natural ecological system." Two other interviewees, both professionals, share his view. Mr. Ting (H 8), a young financial comptroller, who points out that: "Trees can absorb carbon dioxide and release oxygen and this is good for human being. People would be affected, therefore, if the environment is degraded." Ms. Ho (H 13), a newspaper editor in her 20s, asserts that "people's daily activities should follow nature's normal cycle because nature prescribes a certain set of rhythm" in regulating the dynamics on earth. "People would be punished by nature," she continues, "if the air quality, water quality and the environment is degraded."

I-2 How Do People Relate to Nature in Reality?

While almost all the respondents agree that a norm has been reached by the public in Hong Kong regarding the importance of protecting nature and the environment, many of them (H 13; H 21; H 23) also point out that there is a big gap between that norm and what people are actually doing to nature. "The majority of people are in fact destroying nature," complained Mr. Ma (H 23), who is unemployed and lives in a village in the New Territories. Ms. Ho (H 13), the newspaper editor, while affirming the importance of forging a close link between human and nature, concedes that "in reality, it is almost impossible for people and nature [to maintain a close relationship] and that people in Hong Kong are in fact alienated from nature." She continues to explain that one of the major difficulties in trying to (re) establish a close link between human and nature is that "people would have to pay a very high price" for such a link and apparently most people are not yet convinced of the necessity of doing so.

Taking a more apologetic stance than Ms. Ho, Ms. Cai (H 19), a clerical worker in her 30s, believes that the lack of a close link between human beings and nature in Hong Kong is due to the fact that Hong Kong people are born and raised in a high-density urban setting effectively divorced from nature. "[Hong Kong people] do not have a choice," she demurs, "people born in foreign countries could enjoy from birth very spacious natural environment, but for people in Hong Kong, one would already be considered very fortunate if he/she is not born into a household residing in a public rental flat." Sharing this fatalistic perspective on human-nature relationship is the argument that, in the twin processes of urbanization and industrialization, it is inevitable that the natural environment would be affected or even destroyed by human activities (e. g., H 8; H 12).

An outgrowth of the inevitability argument is a pragmatic view expounded by several elite respondents, who believe that a balance should and could be struck between

the need for further development and the need to protect nature. For instance, proclaimed Mr. Ting (H 8), the financial comptroller: "In principle I support the protection of nature.... However, if there is a need for development, whether it is a governmentfunded public project or a private developer's initiative, shouldn't we consider finding some space in the city to allow development to proceed? I think there should be a balance [between development and nature]."

II Perceptions on Environmental Problems

II-1 Are People Concerned about the Environment?

Almost all the respondents say that they themselves are concerned about the environment. The way they offer their responses (sometimes with hesitation; at times with doubt; and at other times with reservations), however, suggests that there are varying degrees of concern. The majority of interviewees have only *limited* concern and many have shown some second thoughts about the importance of this issue. Ms. Tsang (H 3), a secondary school student, for instance, expresses her doubt about the actual degree of air pollution reported by the government: "I notice that the air quality is bad in Causeway Bay [a major shopping area in Hong Kong island] when I walk past that neighborhood, but... it is not that bad... is it really that bad?" Mr. Leung (H 11), a taxi-driver in his 50s, says that he is somewhat concerned about environmental problems "but not necessarily so if there is a conflict of interest."

Most respondents admit that they have seldom discussed environmental issues in daily conversations with their friends, family members and co-workers. Almost all of the respondents say that they believe that the overwhelming majority of their family members, friends, and co-workers are generally *not* very concerned about the environment, unless their personal health is directly affected. For instance, Mr. Law (H 9), a lawyer in his 40s, says that "when people go swimming in polluted sea water and their personal health is adversely affected, then they will show a concern for the environment, if you would regard that as a 'concern."

Mr. Ng (H 18), a local politician in his 40s, says that he and his friends seldom talk about "environmental protection" issues *per se*, but he reminds us that it does not necessarily mean that they do not care about environmental issues, broadly defined. For example, although he and his friends would not use the term "environmental protection" explicitly in their daily conversation, he believes that sometimes their discussion might implicitly pertain to this issue—such as when they all agree that smoking should be banned in restaurants—without necessarily focusing on or mentioning the environmental agenda specifically.

Almost all of the respondents also believe that the general public in Hong Kong are *not* very concerned about the environment. Ms. Cai (H 19), a female clerical worker in her

30s, believes that the public's lack of concern for environmental issues is the result of "a poor sense of civic consciousness" in Hong Kong. She says that, in Hong Kong, "everyone is busy with making a living [and] no one has the time to pay attention to such issues." A number of respondents suggest that the general public might have only recently begun to have more concern for environmental issues because "air pollution has been worsening in recent years and this made people ask the question—why is air quality deteriorating" (Mr. Ng, H 18).

Furthermore, many respondents believe that government officials are, for the most part and/or up until several years ago, *not* concerned about environmental problems in Hong Kong. Mr. Ng (H 18), our local politician, points out that government officials "totally ignored" the environmental issues in the 1980s and the early part of the 1990s.

Mrs. Cheung (H 21), a housewife, thinks that even if government officials are concerned with the environment, they do not have the same level of concern for the environment in different parts of Hong Kong. She believes that there is "huge discrepancy" between different neighborhoods with regard to the level of attention paid by government officials. "The streets in the wealthier neighborhoods are cleaner [than those in poorer sections of the city]," says Mrs. Cheung.

Mr. Ting (H8), a financial comptroller in his late 30s, points out that the government's approach to all sorts of problems, including environmental protection, is very much ad hoc and short-term. Given that government officials have no long-term vision and long-term strategy to deal with problems, he believes that they are not particularly concerned about the environment.

Lastly, most respondents believe that private corporations are *not* concerned with the environment. Both Mr. Leung (H 11), the taxi-driver, and Mr. Mak (H 23), an unemployed construction worker, believe that private corporations are only concerned with "business interests" and will show concern for the environment only "when they are required by law to do so or are pressured by mass media reports." Concurred Mrs. Ma (H 16), a retired housewife, who says that big companies are only concerned with their "own internal environment"—meaning "their offices' physical outward appearance and internal hygienic conditions." Mr. Law (H 9), the lawyer, says that, for big corporations, making a profit is their first priority. "When their primary concern is focussed on the bottom line, they would not consider ethical issues [such as environmental protection]," observed Mr. Law.

II-2 What Do People Mean When They Say They Are Concerned about the Environment? Most respondents have a rather simple notion or *narrow* interpretation about the meaning of environment and of environmental protection. Quite a number of interviewees understand environmental problems primarily as "littering" in the streets and in the countryside. Mrs. Ching (H 22), a housewife, and Mr. Mak (H 23), an unemployed worker, both of whom live in a village, refer to the environment simply as "water" and "air." For

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them, environmental protection simply means "keeping clean"—do not litter.

For instance, the word "environment" is understood by some respondents (Mr. Lui (H 12), aged mid-40s, a newspaper editor; Mrs. Cheung (H 21), aged mid-40s, a housewife) as comprising primarily the "sanitary conditions of one's immediate living environment." With the meaning of the word "environment" interpreted as such, these respondents then say that their relatives and friends are concerned with such "environmental" issues as the "noise," "broken water closets in the public lavatories" and "littered streets."

Moreover, with such an interpretation of the meaning of the word "environment," they also think that corporations are concerned with "environmental" issues, as evidenced by the latter's emphasis placed on "maintaining a hygienic [office and/or shopping] space ... for the sake of their own businesses and corporate image." But, interestingly, these respondents continue to point out that "half" of the general public are not concerned with the environment. They believe that these people—harbouring a selfish attitude of "it's none of my business"—would care less about "air pollution" and "litters in the streets," problems generally perceived to be more prevalent at the city-wide level than in one's own neighborhood.

Mr. Ng (H 18), the local politician, says that for his relatives, the environment constitutes primarily "their immediate surroundings," such as "their living areas, working areas, and areas where they hang out frequently—such as certain streets and neighborhoods." Mr. Mak (H 23) believes that most people are concerned with their own immediate living environment because "they are selfish." Mrs. Ma (H 16) concurs, "My mother lives in the New Territories and keeps her immediate living environment very clean. But she does not care about areas outside of her immediate living area."

Finally, it is interesting to note that while younger and better-educated interviewees have no problem at all with the concept of "environment," some older and poorly-educated respondents do not have the slightest idea about this concept which most of us take for granted! Mr. Lee (H 7), a commercial van driver in his 60s, when asked about his views of the "environment" in Hong Kong at the very beginning of the interview, offers this response: "the [economic] circumstance for our business is not so good in this past year or so." His answer clearly shows that he has interpreted the meaning of the Cantonese word of "environment" as "the circumstance"—which is one of the valid meanings of the word. When he is told the exact meaning of the word used in the study, he then says that he seldom talks about or discusses this type of "environment" with his friends.

II-3 Why Are People Concerned (or Not Concerned) about the Environment?

Most respondents say that they are concerned about the environment because they find the environmental conditions in Hong Kong have deteriorated. Almost all of them identify outdoor air pollution as a serious environmental problem that has triggered their concern for the environment. Almost all of them also cite some firsthand experience with

outdoor air pollution, usually on their way to their offices or schools.

Thus, for most respondents, their expressed concern for the environment is very much a *reflection* of their subjective experience/impression of the objective environmental conditions. For example, Mr. Chiu (H 4), a secondary school teacher in his early 40s, says: "The air quality has deteriorated in the past several years. The temperature has gone up. And it is muggier than before when you get out of the house." Mr. Lau (H 2), a secondary school technician in his early 50s, observes: "On my way to the office this morning, I walked past several trucks parked right next to a construction site. The drivers were enjoying the cool air inside the air-conditioned cabins but the emissions from the trucks were making me very uncomfortable when I walked past them." Mr. Leung (H 11), the taxi-driver, points out that "in the past, one can get a nice view [of the Victoria Harbour] from the Peak. But nowadays [the visibility] is much worse." Ms. Ho (H 13), a newspaper editor in her late 20s, says that this perception—the visibility in the Victoria Harbour is getting worse—is particularly strong among people who have visited places outside of and have recently returned to Hong Kong. She points out that "even pictures taken on a seemingly clear day would turn out to be somewhat murky" and this is why she is concerned about the worsening conditions of Hong Kong's environment.

Mr. Law (H 9), the lawyer, says that he is concerned about the environment because he is concerned about pollution's impact on his *health*. He says that: "An increasing number of things cannot be trusted. For instance, the water coming out from the tap at home is sometimes yellowish and contains a lot of contaminants. Sometime you have to think twice about the quality of the drinking water. The tap water obviously needs to be filtered." All these considerations are making him quite concerned about the environment. Likewise, Ms. Fung (H 6), a social worker in her 20s, says that she is concerned about the environment because "I have allergy and air pollution worsens my health conditions."

One group clearly stands out in their strongly expressed concern for the environment—parents whose child/children are suffering from respiratory problems such as asthma (e. g., H4; H8). These parents are very concerned about air pollution issues because they strongly believe that there is a direct causal link between deteriorating air quality and the *health* of their children. Mr. Ting (H8), the financial comptroller originally from Hong Kong but has lived in the United States for 10 years before returning to Hong Kong 3 years ago with his then 2 years old boy—complains about the impact of bad air quality on his child's respiratory problem, which he insists developed only after they had relocated to Hong Kong. For instance, he says that he has learned from newspaper reports that: "Many people in Hong Kong suffer from allergies. For example, when my son first returned to Hong Kong [from the United States several years ago], he was often sick and he had running nose all the time." And he says that this is one major reason why he is concerned about the environment.

When asked the question why some people are not concerned about the environ-

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ment, some interviewees say that their family members and friends are not concerned about the environment because, in the words of one of the interviewees (Ms. Yeung, H 15), "they do not sense that the environmental conditions have actually deteriorated that much."

Mr. Ting (H 8), the financial comptroller who has lived in the United States for about 10 years, however, offers a different explanation. He suggests that environmental protection is a relatively *new concept* for Hong Kong and therefore many people, particularly the older generations, are not familiar with this notion. He points out that: "It is only until recently that environmental protection issues have been discussed by the public in Hong Kong.... Therefore the level of [environmental] consciousness is not that intense." He adds that there are some practical considerations why Hong Kong people appear not to be concerned about the environment: "They [i. e., Hong Kong people] want convenience; they want to save time. [And such practical considerations] are regarded by Hong Kong people as more important than all those measures designed to protect the environment."

Ms. Ho (H 13), a newspaper editor, somewhat concurring with Mr. Ting, feels that most of her friends are not concerned about the environment because: "This issue does not have any direct, obvious consequences for them.... They all adopt an *utilitarian* outlook, meaning that they are more concerned with matters that would have an immediate financial cost or benefit impact for them personally."

Mr. Leung (H 11), the taxi-driver, believes that "Hong Kong is a rather busy city and it is quite difficult to make a living. [Therefore] most people do not have much spare time to discuss this issue [environment]... After working for the whole day, [most people] will either play mah-jong or go to karaoke bar. Who would have the time to care about environmental problems?"

Mr. Lui (H 12), on the other hand, believes that some people are not concerned about the environment because: "[They] have already *accustomed* to the [environmental problems] and feel that such problems cannot be changed. For example, there is much traffic noise on the streets.... It is difficult to change [such a problem], unless you relocate [your own residence].... If you think it is too noisy [in a certain location] then move to quieter neighborhood."

In fact, Mr. Lui's observation pertains to a recurrent theme that one encounters quite often in the discussion of environmental consciousness in Hong Kong. And that is, many people in Hong Kong believe that the solution to environmental problems could be obtained at the *personal* or *household* levels: One can obtain a better living environment by simply moving to a larger apartment in a better neighborhood. Such a belief reveals one major premise shared by many people: They have defined the word "environment" as comprising primarily one's immediate living conditions—the household and its surroundings.

Since both the problem and the solution of environmental problems in Hong Kong is

so narrowly defined at the personal/household spatial scale, many people then naturally focus their attention and energy in personal financial gains to enable themselves to attain (again, for themselves only) a better "living" environment. In other words, for many people in Hong Kong, personal affluence will lead to a better living environment. It is no wonder that surveys after surveys show that people in Hong Kong have placed economic growth on a higher priority than environmental protection because the solution to one's bad living environmental conditions lies in gaining wealth and, in turn, the ability to acquire a better living environment.

Of course, not everyone in Hong Kong subscribes to this belief. Ms. Ho (H 13), the newspaper editor, states that she is less concerned with the future of Hong Kong's economy than with RSP because: "It depends on what you are going after in life.... If the environment keeps deteriorating day after day, then it is meaningless even if you have become very rich."

II-4 Why Should We Protect the Environment?

Most respondents say that we need to protect the environment because a deteriorated environment has an immediate impact on their personal *comfort* and *quality of life*. Mrs. Ching (H 22), a housewife in her mid-40s, for instance, gives a rather succinct response to this question of why: "So that we can all live comfortably." Mr. Ng (H 18), the local politician, adds: "We need environmental protection because it would help improve the quality of life of our community."

Many interviewees also believe that a degraded environment has an impact on human *health* as well as the *well being* of the next generation. In other words, *anthropocentric* concerns, rather than ecocentric factors, constitute the primary motivation behind most adult respondents' decision to support environmental protection. Mr. Leung (H 11), the taxi-driver, for instance, offers this answer when asked this question: "it [environmental protection] is all for the good of the next generation."

Interestingly, for younger respondents who are still studying at secondary school or who have recently graduated from secondary schools, their rationale for protecting the environment is mostly based on what they have learned in the school. For example, Ms. Tsang (H 3), a secondary school student, says that we need to protect the environment "because there is a hole in the ozone layer and we need to find a remedy to cure such a problem." Apparently, the environmental curricula in the primary and the secondary schools in Hong Kong have been highly effective in converting students' belief in this regard.

Only a small number of interviewees offer *ecocentric* consideration—such as "the protection of endangered species"—as the primary factor in accounting for their concern for the environment. Ms. Fung (H 17), a clerical worker in her 30s and a subscriber to the magazine published by the World Wide Fund for Nature, responds to this question by pointing out that "some birds and some marine organisms need to be protected because

they face the danger of extinction."

Only one interviewee mentions *religious* belief as the rationale for the need to protect the environment. Mr. Law (H 9), our lawyer, says that "it is rather difficult to state a clear reason on why we need to protect the environment." Nevertheless, he thinks that it is "a religious belief" that motivates his concern for the environment. He believes that he is just "a visitor [on planet earth]" and that he should "respect this place and keep it clean."

II-5 Are People Willing to Pay Higher Taxes for Environmental Protection?

Many respondents question the need to increase taxes to help pay for the costs of environmental protection and refuse to pay higher taxes for such a purpose. They believe that the Hong Kong government has much reserved money that could be tapped to help pay for such expenditure. Mrs. Ching (H 22), the village housewife, for instance, claims: "Of course I am not willing [to pay higher taxes]. The government has a lot of money. They should of course take care [of the environment]."

Mr. Mak (H 23), the unemployed, argues that the general public should not be asked to pay higher taxes for environmental protection. Instead, he believes that "the taxes should be levied on certain organizations and industries which are emitting air pollutants."

Mrs. Cheung (H 21), a housewife in her 40s, shows some reservations about paying higher taxes to help pay for the costs of environmental protection. She says that her support for a tax increase will depend on "the degree to which air quality would be improved" and "the cost effectiveness [of the proposed programs]." Mr. Law (H 9), a lawyer, sharing Mrs. Cheung's position, says that he needs to know "why there is a need to [increase tax] and what kinds of methods will be used [to tackle the environmental problems]" before he could reach a decision.

III Perceptions on Respirable Suspended Particulates

III-1 Have People Heard about "Respirable Suspended Particulates?"

Most of the respondents have not come across this scientific term prior to the interview, even though almost all of them have identified air pollution as the major environmental problem that triggers their concern for the environment. When presented with new scientific data on RSP, therefore, most of the respondents confess that it is the first time for them to come across such information.

Interestingly, but not particularly surprising, two types of respondents—government officials and taxi drivers—are familiar with this term. Taxi drivers are familiar with this term because they regularly and intensely discuss issues relating to air pollution control and regulations with their colleagues—issues that have enormous implications for their job and livelihood.

Mr. Leung (H 11), the taxi-driver, offers a considered view—not rare to the scientific community but not commonly found in the other interviewees—on the causal relationship between RSP and health. He points out that he knows that: "RSP is not good [for our health].... [But] you will have to inhale a large amount of RSP before you will get sick. By the time you get sick, however, you may not know if it is RSP that is the primary cause of your illness." He adds that he believes the air pollution problem in Hong Kong is caused to a great extent by air pollutants blown over from Shenzhen. He says that he "doesn't believe [everything about the environment] as reported by the media." "I feel that the air pollutants in Hong Kong are primarily blown over from factories in Shenzhen by the northerly winds.... [The air pollution problem] is not caused solely by Hong Kong's transport sector."

III-2 On Assigning the Responsibilities for Addressing the Issue of RSP

While most respondents say that several parties—government, vehicle owners, and the public—are responsible for the problem, the majority of the respondents believe that the government bears the primary responsibility in failing to regulate and control vehicular emissions. At the same time, they also believe that the government now appears to be committed to tackling the problem, but some suggest that additional social pressure in the form of media exposure and public opinion is needed to push the government into taking prompt actions.

Thus, regardless of the social background of the respondents, there is a major agreement among them that the government should take the leading role in regulating and/or enforcing the regulations over vehicular emissions.

Several other types of actions should be taken by the government—e.g., environmental education. Mr. Ng (H 18), the local politician, points out that it is important for the government to strengthen its work on educating the public about environmental issues by, for example, publicizing the adverse health impacts of RSP. His reasoning: "If someone like myself, who has served in the legislature [and should have been exposed to much environmental data], has not heard of the detailed information on RSP-related impacts, then you could imagine how much less information the public might have been exposed to." If we want the public to give support to the environmental cause, Mr. Ng argues, "then we need to make people aware of such problems in the first place."

III-3 On Assessing Impact of RSP on People's Health

When asked whether they believe RSP has had any impact on their personal health, a few of the respondents say that they remember a feeling of "discomfort" in their throats when they are exposed to "polluted air," particularly in areas with many vehicles. They have thus effectively equated "polluted air" with "RSP" in their thoughts.

However, many respondents say that either they are *not sure* or they think RSP only have a negligible impact on their own health. This may help explain the reservation and

hesitation shown by many interviewees when they answer the question: "Are you concerned about the environment—" Mr. Lui (H 12), a newspaper editor, says that: "Thus far we do not know exactly what the RSP look like. What consequences will result from inhaling various amount of RSP? ... The consequences are not visible. It seems that [the consequences] cannot be measured." Mr. Ting (H 8), the financial comptroller, admits that: "[I am] really not sure [whether RSP has affected my health]. May be it is because there are so many people on the streets.... One may get infected [by viruses] from being in a crowded place. So it may not be a direct impact from RSP."

Many respondents are not sure about the impacts of air pollutants (either RSP or second-hand smoke) on their own health. For instance, Mr. Ng (H 18), when asked whether he thinks he himself has been affected by second-hand smoke, says that "Yes, there is the general feeling [that I have been affected by second-hand smoke], but in fact I do not have any idea." Then, turning to the interviewer, he asks, "Do you know [the answer]?"

III-4 On Proposed Suggestions in Addressing the Issue of RSP

In this section, several proposals on dealing with the issue of RSP are read to the interviewees and they are asked whether or not they agree with such propositions. They are also asked to give an explanation for their views.

Proposal (i)

Respirable suspended particulates is a necessary evil to maintain our modern material lifestyle, so there is not much we can do about it.

Almost all of the interviewees do not agree with such a view. While they share the belief that something can be done to reduce RSP and yet maintaining the modern lifestyle, they differ in regard to the proposed solutions. Mr. Lau (H 2), the secondary school technician, believes that scientific research can help reduce RSP emission. Mr. Chiang (H 1), a government official, suggests switching from taking taxis to taking the subway train to help reduce RSP.

Ms. Cai (H 19), a clerical worker, agrees with the above views but thinks that there is a limit to our efforts in controlling RSP emissions. She says: "The emissions are linked to some of our necessities. You cannot go back in time and stop using motor vehicles. Are you suggesting that we should stop using trucks and instead use hand-push carts to deliver our goods? Is that possible?"

Proposal (ii)

We can cut back on the production of respirable suspended particulates by strictly regulating vehicular emissions. This will require some commercial vehicles like taxis and light trucks to switch to liquefied petroleum gas (LPG), which will result in higher operating costs for the operators and higher transportation costs for the consumers.

Many interviewees say that they are willing to pay a little bit more money for LPG taxis to help reduce RSP emissions (and to protect the environment). Some other interviewees say that people can take other means of public transport if they think LPG taxis are too expensive. There seems to be a consensus among all the interviewees that environmental protection does carry a price tag but that they are all willing to pay for a cleaner environment.

Proposal (iii)

We can reduce the total amount of respirable suspended particulates by expanding and promoting the use of public transportation networks such as the subway and railway systems. We can also reduce the total amount of respirable suspended particulates by restricting the use of private automobiles.

While all the interviewees agree with the proposal to expand and promote the use of public transportation networks, there is a major disagreement with regard to the restriction on the use of private automobiles, which is not necessarily a contest between those who drive and those who don't. Generally speaking, while interviewees who do not own any vehicles give their full support to the proposal in restricting private cars, owners of private vehicles (including all those who say that they support environmental protection and are willing to pay more to help protect the environment) invariably question the rationale and the effectiveness of restricting private cars.

Mrs. Cheung (H 21), a housewife who does not own a car, has reservations about this proposal because she is concerned about the consequences of restricting the number of private automobiles. She believes that such a proposed action will create "inconveniences" because it will reduce the total overall capacity of the transportation system. Moreover, she thinks that "reducing the number of private automobile will somehow make Hong Kong appear to be less prosperous." She adds, "If I could afford it, why can't I buy a car? If I have the money, I will buy one [for myself]."

Mr. Mak (H 23), who is unemployed, also expresses reservations about imposing control on the number of private cars because "Hong Kong is free market place... and if you impose control [on auto ownership] then it will benefit those who have already owned private cars." Moreover, adds Mrs. Ma (H 16), a retired housewife, "a restriction on private automobile will have an enormous impact on the economy because it will have repercussions for many other businesses such as auto insurance companies and repair shops." Therefore, she does not support such a proposal.

Proposal (iv)

We should cut back on our consumption of electricity because respirable suspended particulates are also produced by the power plants. This will require a change in lifestyles and possibly additional expenditures in the form of higher taxes and prices.

While older respondents say that they do not have any problem in reducing the use

of electrical appliances such as air-conditioners, younger respondents express reservations about this proposal. Older interviewees say that cutting consumption of electricity—like turning off air-conditioners—actually saves them money and they do not care about air conditioning anyway. Therefore, they do not see any problem in supporting such a proposal.

Younger respondents, on the other hand, say that it is quite difficult to reduce the consumption of electricity because modern lifestyle is so dependent on electricity. For example, Ms. Tsang (H 3), a secondary school student, says: "Everything runs on electricity nowadays, such as the computer, and the computer needs to be put in an airconditioned room." Mr. Ng (H 18), the local politician, believes that our modern life-style is inextricably linked with electricity consumption. For instance, he says that "it is almost impossible not to use air-conditioning in Hong Kong during the summer months ... [if there is no air-conditioning], ha ha ha, we may die...." He suggests that the real issue is not so much the problem of how we could reduce consumption of electricity but how we could search for alternative, renewable energy sources such as solar power.

Mrs. Cheung (H 21), a housewife, says out that she agrees that it is good for the environment for people to use energy-efficient appliances. But she points out that "the prices of energy-efficient light bulbs should be reduced ... so that the general public could afford them."

IV Public Perceptions on Risk Comparisons

In this section, interviewees are asked whether they are more concerned about RSP or about some alternative risk factors such as second-hand smoke, natural disasters such as typhoon and global climatic change, traffic accidents as well as the economic outlook of Hong Kong.

IV-1 On RSP vis-à-vis Second-hand Smoke

Some interviewees are more concerned about RSP than second-hand smoke, but most interviewees are more concerned about the latter than the former. Ms. Tsang (H 3), a secondary school student, who is more concerned with second-hand smoke than RSP, offers such a rationale: "May be it is because you can actually smell and see second-hand smoke, but you cannot see or sense RSP and therefore you do not know whether you are exposed to it." Her view is shared by several other interviewees, such as Ms. Cai (H 19), who has a very sensitive upper respiratory system and finds second-hand cigarette smoke extremely offensive.

Mr. Ng (H 18), the local politician, admitting that he does not have a complete knowledge of the respective impacts of second-hand smoke and RSP, thinks that most people in Hong Kong are more concerned with second-hand smoke because "the public in

general have already developed a better understanding of the problem of second-hand smoke whereas not many people have learned about RSP." Mrs. Ching (H 22), a house-wife, for example, says that she is more concerned about second-hand smoke because there has been so much publicity on its adverse health impacts on TV.

Ms. Lai (H 5), a middle-aged housewife, is however more concerned with RSP than second-hand smoke. She points out that: "You can avoid exposure to second-hand smoke, e. g., by not going to places where there are a lot of smokers, but you cannot stay away from RSP which can be found anywhere." Ms. Fung (H 17), a clerical worker, offers a similar view: "I am less concerned with second-hand smoke because if I see someone smoking, I can walk away."

Nevertheless, Mr. Ting (H 8), the financial comptroller, reminds the interviewer that sometimes one simply cannot stay away from second-hand smoke even if one wants to. He explains: "Sometimes I go into a meeting with clients and everyone in the room is lighting up. I cannot walk away. I have to sit there for several hours and cannot avoid [the second-hand smoke]." Therefore, he is more concerned with second-hand cigarette smoke than with RSP.

IV-2 On RSP vis-à-vis Natural Disasters (e.g., Typhoons)

Most respondents are more concerned with the RSP than natural disasters such as typhoons. For instance, Ms. Lai (H 5), a middle-aged housewife, says: "You cannot escape from RSP because it is ubiquitous and you are exposed to it for a long-term period, while typhoons simply come and go in a few days and we always receive advanced warning from the weather station." In the words of another respondent (Mr. Ng, H 18): "Hong Kong has already developed the capability to manage and cope with the impacts of typhoons. Therefore, typhoons are no longer considered as a major problem."

But there are a few respondents who are more concerned with typhoons than RSP because the impacts from the former are highly visible and immediate. Mrs. Ching (H 22), for example, provides a vivid account on why she thinks typhoons are more frightening: "[During the typhoon season,] there are at times landslides and at other times the rivers are flooded ... people could be killed instantly." Ms. Cai (H 19), the clerical worker, is also more concerned with typhoons than RSP because: "The scientists are still conducting research on the RSP [and therefore] we do not yet know the degree of damage that could result from [exposure to] RSP.... Thus far it is only 'talk' regarding [matters concerning] RSP." Mrs. Cheung (H 21) is also more concerned with typhoons than RSP because "man can control RSP if man can create the RSP, then man should be able to control them and reduce them." But we "cannot control natural disasters—which simply come and go."

IV-3 On RSP vis-à-vis Global Environmental Change

Many interviewees find it difficult to compare these two issues because, in the words of one interviewee (Mr. Lau, H 2): "I don't quite understand the impact of such global

environmental issues and therefore cannot make a comparison." Others find it difficult to compare the two issues because, in the words of the civil servant, Mr. Chiang (H 1): "There is a close connection between these two issues. Resolving the RSP problem should probably help us resolve the other problem of global environmental change." Mr. Leung (H 11), the taxi-driver, also concurs with this view.

Mrs. Cheung (H 21), a housewife, along with a handful interviewees, is more concerned with global environmental change than RSP because "if the global warming problem cannot be properly controlled, then it will have disastrous consequences for the entire world."

Surprisingly, Mr. Mak (H 23), the unemployed, offers a quite sophisticated view on the issue of global environmental change, which he is worried about more than RSP. He says that: "Global warming ... could affect the ozone layer. It requires the effort of more than just us [our government] to address this problem. It will require other countries to implement and enforce the same regulations simultaneously. Otherwise, the consequences [of global environmental change] will remain [unresolved]." One wonders from where/whom does he learn about these issues.

IV-4 On RSP vis-à-vis Traffic Accidents

Most respondents are more concerned with the RSP than traffic accidents. A typical response offered by several interviewees (Ms. Tsang, H3; Ms. Lai, H5): One can take active measures—be extra careful when driving or crossing streets—to minimize the possibility of getting caught in traffic accidents.

Again, there are a few respondents who are more concerned with traffic accidents than with RSP because the impacts from traffic accidents are much more visible and immediate than those emanating from RSP. Mrs. Ching (H 22), a housewife, who belongs to this category, claims that while she can readily visualize the aftermath of traffic accidents—which are frightening scenes—"it is not so easy to see the RSP which are not quite visible to the naked eyes, therefore they seem less frightening." Mr. Mak (H 23), the unemployed, says that he is more concerned with traffic accidents because: "[They are] immediate, whether you are injured or killed. You know the consequences right away.... The impact from RSP is not immediate...it will come slowly ... and [therefore] we have time to deal with this matter."

IV-5 On RSP vis-à-vis the Future of Hong Kong's Economy

Almost all the interviewees, particularly the younger ones, reply that they are more concerned with the future of Hong Kong's economy than RSP. Typical responses from several respondents who express such a view: "The economy is of course a more important matter than RSP because a person will not even bother to think about environmental issues if he/she is out of a job" (Mr. Lau, H 2); "The future of the economy directly affects my livelihood, quality of life and basic living expenses. [Without a good

economy] we could easily not even afford to have a meal" (Ms. Cai, H 19). Mr. Ng (H 18), the local politician, says that he is more concerned about the economy than RSP because "we do not know when the economy will recover from the recent slump." Mr. Ting (H 8), the financial comptroller, admits that he is more concerned with the future of Hong Kong's economy than with RSP because: "It is my job to keep an eye on the city's economic prospect. I read the financial news reports on a daily basis because [financial matters] have a greater impact on me [than RSP]."

Discussion and Conclusion

While the public have reached a consensus that Hong Kong's environmental problems are serious and in need of urgent attention, several questions have remained unresolved and continued to puzzle researchers on Hong Kong's environmentalism: How do people view the relationship between human and nature, both in normative terms and in reality? What exactly do people mean when they say that they are concerned about the environment? Why are people concerned, and, for some, not so much concerned, with environmental problems? Why do they think they need to protect the environment? While results from this case study do not provide a complete answer, they offer further clues to help resolve these issues.

First of all, several principal dimensions of a cultural model on nature could be gleaned from the respondents' remarks on human-nature relationship. Nature is widely regarded as an indispensable component of a human-centered world. It is defined primarily by its use value to promote the comfort, health and well-being of the human race. However, while accepting that nature is an important element that sustains and nurtures human life and should therefore be protected, people in Hong Kong are generally not willing to make personal or collective sacrifices to help control or reduce development's adverse impacts on nature. Underlying such a tentative and ambivalent attitude toward nature protection is a rather widely-shared sense of powerlessness and resignation among the public in general and a notion of rational-pragmatism slowly spreading among the elite in particular.

Next, with environmental protection defined and accepted universally as a motherhood issue, it is no surprise that almost all the informants have affirmed their concern for the environment at the very outset of the interviews. But their answers show that this concern is, at best, qualified and, at worst, expressed with some reluctance. This impression of a limited concern among the public is further strengthened by the interviewees' own admission that the overwhelming majority of their friends, family members, and co-workers are generally not concerned about the environment. Moreover, the informants also believe that the general public, government officials and private corporations in Hong Kong are not very concerned about the environment. In other

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words, in the minds of the interviewees, with the exception of themselves, almost everyone else in Hong Kong is not very concerned about the environment.

This opinion among the interviewees—that everyone else is not concerned about the environment but me—is something of an enigma. Why do they think that they are the only one who are environmentally concerned, but not people around them? A review of the explanations for their own expressed concern for the environment as well as those pertaining to their views that others are not concerned may provide a hint as to why they hold such a belief.

Invariably the interviewees have referred to their own firsthand personal experiences and observations as the basis of their concern for the environment: Our secondary school technician (Mr. Lau, H 2) grumbling about the emissions from trucks that make him uncomfortable; our social worker (Ms. Fung, H 6) complaining of air pollution that might trigger her allergy; and our financial comptroller (Mr. Ting, H 8) fearing that air pollution might worsen his child's asthma condition.

That is, the interviewees' expressed concern for the environment is primarily a reflection of their personal subjective experiences and firsthand impressions of the objective environmental conditions. And somehow they think that no one else, or at least not many others, but they themselves have encountered such experiences and made such observations. Hence, they would put forward the following remark in accounting for the other person's lack of concern for the environment: "they [their friends and family members] do not sense that the environmental conditions have actually deteriorated that much" (Ms. Yeung, H 15). Some respondents, without knowingly doing so, allude to their own personal backgrounds—overseas experiences, educational attainment—as the basis for their own unique sets of values that in turn distinguish themselves from the "other" Hong Kong residents on the issue of environment. Examples of setting the environmentally consciousness oneself against the larger environmentally insensitive crowd include the comment made by Mr. Ting (H 8) on how Hong Kong people's priority on "practical considerations" such as convenience overshadows their concern for environmental protection as well as the remark made by Ms. Ho (H 13) on how Hong Kong people's fixation on immediate personal financial considerations outweighs their interests in long-term societal gains from environmental protection measures.

The "frog-in-boiling-water" syndrome has also been offered by some interviewees to account for the public's perceived lack of concern for environmental problems. Mr. Lui (H 12) believes that many people in Hong Kong may have already accustomed themselves to the adverse effects of environmental problems and that they have implicitly accepted them as an unavoidable part—and necessary costs—of conducting their lives in this city. But, at the same time, Mr. Lui points out that for people who could afford it, they would usually opt for relocation to a better neighborhood to improve their own living environment—sort of jumping into a separate pot of cool water instead of trying to cool off the existing pot of boiling water. Underlying such a notion, interprets Mr. Lui, is primarily

a sense of powerlessness on the part of Hong Kong residents in effectuating any change in correcting the environmental problems in one's neighborhood.

Now that we have scrutinized the rationales for the interviewees' belief that they themselves are concerned about the environment but that other people are not, one cannot help but ask these questions: What exactly do the interviewees mean when they say they are concerned about the environment? What do they mean when they say that there is a need to protect the environment? Is there any connection between the way they interpret the meanings of the concepts "environment" and "environmental protection" and their belief that they are somehow above the crowd when it comes to this particular issue?

When asked directly what the environment means to them, many interviewees consider it constituting primarily one's "immediate living environment." Protecting the environment at that personal/household spatial scale thus simply means "do not litter." Moreover, most of them refer to anthropocentric interests—health, comfort and quality of life—as the primary considerations in their decision to embrace environmental protection. With the word "environment" defined narrowly as such and consigned at the individual/household spatial scale, and with the support for environmental protection driven mainly by anthropocentric factors, it is not surprising to find the informants claiming that they are concerned about the "environment."

But it is also precisely this rather narrow notion of the word "environment" that might have led them to belittle the environmentally insensitive "others." For instance, Mrs. Ma (H 16) tells us that her mother "keeps her immediate living environment very clean" but that, at the same time, "she [her mother] does not care about areas outside of her immediate living area." With everyone perceived to be interested only, or at least primarily, in one's own immediate living environment, the interviewees feel that problems generally observed to be more prevalent at the city/metropolitan level than at the household level—such as air pollution and litters on the streets—are thus neglected by the other members of the public.

Obviously, all the interviewees could have in fact operationalized the concept of "environment" at multiple spatial scales. However, based on the responses from the interviews, it is apparent that their perceptions of the "environment" operate predominately at two spatial scales—the individual/household and the city/metropolitan levels. And it is evident that they are, without consciously expressing or admitting it, referring to the former when thinking about their own concerns and yet switch to the latter when it is time to evaluate the public's. Accordingly, our interviewees have come to the conclusion that the public is not concerned about the environment—understood at the larger city/metropolitan spatial scale—but that they themselves are worried about the environment—defined as their own immediate living conditions. Such a proposition, of course, begs another question: Why do people switch from one spatial scale to another in thinking about environmental problems perceived by themselves as opposed to the

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others? The answer to this question will have to await further research on this dimension of Hong Kong's environmentalism.

Another set of interesting findings from the case study pertain to the public's perceptions of respirable suspended particulates. While almost all of the interviewees have identified air pollution as one major environmental problem that has triggered their concern for the environment, most of them admit that they have not heard of this specific term prior to the interview. They are thus totally ignorant of the specific details on the causes and possible consequences of RSP here in Hong Kong. Even a former legislative councillor—who should have been exposed to more environmental data than the general public—acknowledges that he is not aware of the detailed information on RSP-related impacts. Consequently, given their lack of the basic knowledge on RSP, many respondents concede that they are not sure if their health has been compromised by exposure to RSP specifically. They also add that they are not sure about the impacts of other types of air pollutants on their own health.

That is, the public have a general knowledge that air pollution can lead to adverse impacts on health. But when they are asked whether their own health, or that of their relatives and friends, has in fact been affected by RSP, most of them display a sense of uncertainty. What this means is that people's concern for the environment—although genuine—does not appear to be a direct outgrowth of a sense of victimization from pollution. Instead, their general knowledge about environmental issues has been acquired in large measure from stories reported in the mass media. This fact may also help explain why the interviewees are somewhat less than enthusiastic in expressing their concern for the environment.

Many respondents say that, in order to help reduce RSP emissions, they are willing to make small sacrifices—such as paying for a cleaner, albeit more expensive, mode of transportation; modifying their lifestyles to help cut the consumption of electricity; and buying energy-efficient appliances that cost them more money than regular ones. At the same time, however, many of them also point out that there is a limit to such environmentally friendly actions to control RSP emissions. Some of them even show empathy for those—such as taxi-drivers and automobile salespersons—whose livelihood may be adversely affected by the increasingly stringent environmental regulations.

In conclusion, while the majority of the public in Hong Kong have repeatedly told pollsters that they believe environmental problems have become very serious in the city, they are at the same time highly sceptical about the actual degree of concern expressed by their neighbours, friends and relatives. Their belief that only they themselves are environmentally conscious but not the others probably stems from the fact that people in Hong Kong tend to, unconsciously, think about the concept of "environment" at several different spatial scales and, unknowingly, switch between these spatial scales in evaluating their own environmental attitudes and behavior and those of others around them. In the end, their scepticism is further reinforced by, or sometimes in itself a logical extension of, their own mental model on nature, where an emerging social norm on the importance of protecting nature is eclipsed by a fatalistic mood among the public, on the one hand, and the pragmatic concerns of the elites, on the other.

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