住友コンフェレンス 2024：
アジアの日本研究（2）：文化の比較から持続的な発展へ

Sumitomo Conference 2024:
Japan Studies in Asia (2):
From Cultural Comparisons to Sustainable Developments

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はじめに

—— 園田 茂人（東京大学東洋文化研究所教授）

本報告書は、2024 年 10 月 12 日にオンラインで実施された Sumitomo Conference 2024 で発表された５つの報告、及び２つのコメントを収録したものです。昨年の報告書の場合、Zoom 上で発表された内容を起こし、これを報告者に一度チェックしてもらった上で再度編集して完成に至りました。発表内容を書き起こしているので、文章は口語体でわかりやすくなっているものの、報告書を作成するための時間が長く、結局 Conference が終わってから４か月ほどして報告書が完成したことになります。こうした手法を取ったのも、Zoom 上での報告はビデオとしても編集され、対外的に公開されるようにしたからなのですが、文字化された報告書だけでなく画像の編集も思いのほか時間がかかり、何より必要とされた手間が半端ありませんでした。そこで今回はビデオの編集作業はせず、原稿を報告者や討論者から事前に提出いただき、これをもとに報告書を作成することにしました。ですので、口語体と文語体とが混ざった形で本報告書は作られています。

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昨年は住友財団にとって最初の試みということもあり、多くの試行錯誤がありました。報告者や討論者の選定やプログラム作成もさることながら、どのようなお金の流れにするか、報告会がもつ目的の中で何を一番重視するかなど、いろいろ決めないといけないことがあったからです。今年は昨年の経験を踏まえ、私の方からの財団への助成申請という形ではなく財団の方からの寄附金の利用という形で、報告会の準備と本報告書作成の作業が進みました。そのため、必要とされる書類作成業務やコミュニケーション・コストは大幅に減り、その分、報告者や討論者とのやり取りに集中して作業に取り組むことができました。他方で、報告者や討論者も、昨年度の様子を理解した

上で報告・コメントの準備に取り組むことができたでしょうから、こちらも効率的に作業が進んだものと思います。経験の積み重ねがよいパフォーマンスを産んだ好例といえるでしょう。

昨年との違いで言えば、もう一点、言語の扱いがあります。昨年は基本的に日本語と英語の併用というスタイルを取りましたが、今年は Conference の前半は日本語のみ、後半は英語のみとし、両者の混用を避けることでコミュニケーションがしやすくなるよう心掛けました。そのため、本報告書でも第１セッションは日本語のみ、第２セッションは英語のみの表記となっています。ただ、日本語であれ英語であれ、それぞれのセッションでの討論ややり取りは面白かったので、これを本報告書では最後に一括して纏められています。

昨年もそうですが、討論者には、報告者が申請書を提出した年度に専門委員として、申請書の選抜に関わった先生方にお願いしました。専門委員は国別に決まっていて、複数にまたがる国での申請書を同時に読むことはないのですが、こうして報告会に討論者としてご参加いただくことで、自らの評価が正しかったのかどうかを確認いただくという隠れた目的があります。何より、研究成果をめぐって討論いただくことで、日本とアジアの「相互理解の増進」が図れるといった利点もあります。

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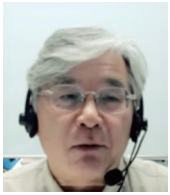
今回の報告は 2019 年度の住友財団「アジア諸国における日本関連研究助成」の助成対象者から、最終報告書を提出し、一定の成果を得られた人・グループを選び出した上で、ある程度内容が似たグループを作った上でプログラムを作成しました。今回の Conference の参加者で、「自分もこうしたオンライン報告会で報告をしたいが、どうしたらよいのか」という質問を、チャット機能を使って出された方がいましたが、日野事務局長が「来年の報告会は 2020 年度の助成対象者による報告会を行う予定だ」とお答えになっていました。多分来年以降も似た形で報告会が組織されていくことになるのでしょうが、この小さな報告書が、その際にも活きることを願っています。

1 開会の辞

—— 日野 孝俊（住友財団常務理事・事務局長）

園田 茂人：



これから住友コンフェレンス 2024「アジアの日本研究（2）：文化の比較から持続的発展へ」を始めたいと思います。進行役を務めます、東京大学の園田です。

本日はまず第 1 セッションで国立済州大学の孫先生と国立政治大学の楊先生にお話しをいただいた後、東京外国語大学の澤田先生にコメントを頂きます。第 2 セッションはすべて英語で行います。

それでは 3 時間のプログラムを始める前に、住友財団の常務理事・事務局長である日野様よりご挨拶を頂きます。

日野 孝俊：

園田先生、ありがとうございます。前半は日本語でのセッションですので、日本語でご挨拶させていただきます。

本日は、ご参加いただきありがとうございます。住友財団の日野でございます。東京大学東洋文化研究所の園田先生のご協力を頂きまして、このような Conference を昨年に引き続き開催できますことを、大変うれしく思っています。

私ども住友財団は 1991 年、当時の住友グループ 20 社によって設立された財団でございます。住友グループは 17 世紀初頭から 4 世紀に渡って続いているグループで、世界最古の財閥とも言われています。財団の理事長である住友吉左衛門氏は住友家の第 17 代当主に当たります。財団ではいくつかの助成プログラムを実施しておりますが、そのうちの一つが日本関連研究助成です。日本に関連する研究を行っているアジアの研究者の方々に対して助成を行うというものです。その目的の一つは、アジアの

国々で日本理解を深める素地を形成し、ひいては日本とアジア諸国との相互理解促進の一助にしようとするものです。

昨日、日本の被団協がノーベル平和賞を受賞したニュースは、日本国内でも大変驚かれました。私も日本人として喜ばしいと感じる反面、原爆投下から 80 年もたって未だにこのような努力を続けなければならない現状にも、改めて直視しないといけないと思っています。お互いがお互いを理解するということは、平和への大切な要件の一つです。住友財団での研究助成が、アジア各地で日本研究を進める方の力となり、そこから研究が発展してアジアと日本の相互理解が深まることに繋がることになれば、われわれとしても嬉しく思います。

本年度に関しては、ちょうど今、募集を行っているところですが、昨年度の実績で申し上げますと、19 カ国から 853 件の応募がありました。選考の結果、69 件、合計で 5,000 万円の助成をおこなっております。過去 33 年の実績を累計致しますと、応募は 1 万件を超え、1,881 名に対して総額 14 億 2,000 万円の助成を行って参りました。

住友財団では従来、助成後の贈呈式や発表会を行っておらず、過去の助成者との交流は個別にお会いするだけにとどまっておりましたが、せっかく 1,800 名を超える過去の助成者がおりますので、その方々が交流できる機会を設けたいと思っていたところ、昨年、東京大学の方からご提案を頂きまして、昨年度からこのような Conference を開催することとなりました。今年が第 2 回目となります。

今回は 2019 年度の助成対象者の中から 5 名を選びまして、発表していただくことになりました。単なる発表会でなく、議論が行われる場になることを願っています。 3 時間の長丁場、是非最後までご参加いただければと思います。ありがとうございました。

園田 茂人：

日野様、ありがとうございました。

これから第 1 セッションに移りますが、その前に一つアナウンスがございます。

本日の日本語セッションに関しては澤田先生、英語セッションに関しては山本先生に、それぞれ討論者をお願いしていますが、実はお二人は、2019年度の選考にあたって専門委員としてご貢献いただいております。このお二人のお眼鏡にかなって、本日の報告者の申請が採択されたのです。ですので、報告者と討論者の関係は、実は申請者と査読者という関係でもあることをご理解いただければと思います。

それでは孫先生、25分間のご報告、よろしくお願いします。

2 第１セッション（日本語）：日本研究における「比較の力」

（1）孫 栄奭（国立済州大学助教授）：「マルチメディア・コーパスによる発話時非言語行動の日韓対照研究」

1．はじめに

話し手は、言語表現とともに、さまざまな手段を用いて情報を伝えている。対面的な言語使用場面の場合、そのさまざまな手段の中でとくに注目されるのが、視線・表情・身振り・声の調子などの非言語表現である。そして、話し手がどのような言語表現をどのような非言語表現を伴って使用するのかという、言語表現と非言語表現との関係の究明は、言語行動研究の中心的な課題の一つであり、これまで多くの研究がなされてきた。

だが、その大半は、たとえば、発話参加や話者交代などある行為の達成のために、視線がどのような役割を果たすかなど、非言語表現の機能に注目して、言語・非言語表現の関係を論じたものである。それに対し、従来、特定の言語表現の発話時に、どのような非言語表現が現れているかを分析したものは非常に少ない。中でも、単語単位（特に、自立語）にもとづく研究は、殆どないといえる。

その理由の一つとして、用例収集の難しさがあげられる。書きことばの場合、たとえば、新聞コーパスなどを用いれば、後述する「私たち」や「僕ら」などは何千例も瞬時に集められる。だが、対面的な言語使用場面での用例は、現時点では、公開されている大規模コーパスがなく、調査しようとすると、発話と発話場面のデータ収集や音声の書き起こし作業などから始めなければならない。このように調査の前段階で相当の時間と労力が必要とされるので、

従来の研究では、現実のデータを大量に集め、そこから特定の単語などを取り出し、その発話時における言語行動を記述するというタイプの研究はあまりなされてこなかった。

こういった理由から、重要な論点であるにもかかわらず、文や句、単語など特定の言語単位にもとづいて調査を行うことが有意義であるか否かについて、実は十分な議論がなされていない。そこで、本発表では、一つの試みとして、日本語と韓国語における「一人称複数代名詞」に注目し、その発話時の、言語表現と非言語表現との関係を調べることで、単語単位にもとづく言語行動研究の有用性について論じる。

2．問題の所在

発表者は以前、日本語の「私たち」「僕ら」「俺たち」など「一人称単数＋タチ・ラ」を対象に、その発話時における話し手の視線表現について調べたことがある（孫 2014）。孫（2014）は、単語単位から言語・非言語表現の関係を調べた数少ない研究事例の一つであるが、調査の結果、「一人称単数＋タチ・ラ」の意味に、（1）のように聞き手が含まれている場合と、（2）のように聞き手が含まれていない場合とでは話し手の視線表現が異なるという傾向が見出せた。

（1）［人間の生死に関する発話の中で］で　あのー　簡単な　話なんですけれども　私たちは　おぎゃーと　生まれてから　あのー　死に　一歩一歩　こう　近づいているわけですよね。
（こころの時代～宗教．人生［NHK 教育］、2009 年 5 月 10 日、54 分 32 秒）

（2）［過去と現在のメロンの味を比較する発話の中で］（話し手：80 代、聞き手：40 代）あんまり　おいしいもんて　無い　時代なんですよ　私たちが 育った　時代は。
（生活ほっとモーニング［NHK 総合］、2009 年 5 月 1 日、22 分 17 秒）

しかし孫（2014）は、「一人称単数＋タチ・ラ」しか扱っていないので、見出した傾向が他の一人称複数代名詞にも適応できる性質のものであるかどうか判断できない。また、現実の言語行動は、発話参加者間の関係や状況など、それをとりまくさまざまな関連要素に影響を受けながら現れるので、傾向を見出す過程で、他の関連要素から影響を与えられている可能性も排除できない。

そこで、本発表では、「一人称単数＋タチ・ラ」以外の、日本語の一人称複数代名詞についても調査を行う。それに加え、韓国語の一人称複数代名詞も対象に、視線表現との関係を調べることにする。もし「一人称単数＋タチ・ラ」の場合と類似した傾向が、両言語における他の代名詞からも見出せれば、それは、単語の意味と視線表現とが強い相関関係にあるということを実証することになり、反対に、異なった傾向が見出せても、それは、「一人称単数＋タチ・ラ」のみに注目したときには気づけなかった新しい知見になると考える。

3．マルチメディア・コーパス

単語の意味の違いが、発話時における話し手の視線表現に与える影響を調べ、そこから何らかの傾向を見出すには、現実の大量のデータにもとづく計量的な実態調査が必要である。そして、その実態を追求するには、従来の計量的研究で、よく用いられてきた「コーパス」が有用な手段になりうる。だが、従来のコーパスは、主に、書きことばや話しことばの文字・語彙・文法・音声の研究のために作られてきたもので、言語表現がどのような非言語表現とともに発せられたかなどに関する調査には利用できない。そこで、本発表では、「マルチメディア・コーパス」を調査に用いることにした。

マルチメディア・コーパスとは、「話し手の発話（音声）を文字化したテクストとその発話場面の映像とをコンピュータ上で同期させ、文字化テクスト上の文字列（単語など）を検索すると同時に、その発話時の映像・音声をも参照できるようにしたコーパスのことである」（石井・孫 2013）。その最大の特徴は、発話場面の映像を参照することによって、話し手と聞き手のコ

ミュニケーション行動をまるごと観察できるという点である。たとえば、40代の男性話者が、表情「笑い」を伴いながら発話した「ワレワレ」のように、検索結果を絞り込むこともでき、一人称複数代名詞の使用状況を考慮しながら、その実態を効率的に調べることができる。

ここでは自作した、二種類のマルチメディア・コーパスについて、簡単に紹介する。

3.1 「日本語対談番組のマルチメディア・コーパス」

「日本語対談番組のマルチメディア･コーパス」（以下､「日本語対談番組コーパス」）は､2009 年３～８月の間､大阪の６放送局７チャンネル（NHK 総合･NHK 教育・ABC テレビ・関西テレビ・テレビ大阪・毎日放送・よみうりテレビ）で放送された対談番組の中で、４人以下の発話参加者による 23 種類の対談番組 106 回分をもとに作成している(文字化テクスト：約 40 時間分)。

3.2 「韓国語対談番組のマルチメディア・コーパス」

「韓国語対談番組のマルチメディア・コーパス」（以下､「韓国語対談番組コーパス」）は、韓国語の対談番組を資料に作成したコーパスである。2013 年３～８月の間、韓国ソウルの４放送局５チャンネル（KBS 1・KBS 2・MBC・SBS・EBS）で放送された７種類の対談番組 22 回分が収録されている（文字化テクスト： 約 20 時間分)。「韓国語対談番組コーパス」は、その作成の目的が、日本語と韓国語における言語行動の比較にあったため、「日本語対談番組コーパス」と同じく、発話参加者数を４人以下にかぎり、（年代は異なるものの）番組収録期間を合わせている。

４．日本語と韓国語の一人称複数代名詞

4.1　日本語の一人称複数代名詞

「日本語対談番組コーパス」で一人称複数代名詞の用例を検索したところ、「一人称単数＋タチ・ラ」（「ワタシタチ」（115 例)、「ワタシラ」（７例)、「ボクタチ」（９例)､「ボクラ」（27 例)､「オレタチ」（19 例)､「オレラ」（３例)､「ウ

チラ」(２例)) の他に、「ワレワレ」(89 例) と「ワタシドモ」(３例) が見つかった。

そしてこれらの単語を対象に、その意味を、大きく、聞き手を含む場合と含まない場合に分類した。ここでいう「聞き手」とは、話し手に直接話しかけられている発話参加者（「直接聞き手」）のことで、発話現場に話し手を除く発話参加者が二人以上いる場合には、前後の文脈や一人称複数代名詞を含む発話文の内容にもとづいてその判断を行っている。

4.2　韓国語の一人称複数代名詞

韓国語における一人称複数代名詞には、‘우리’と‘저희’の二種類がある。白（2004）によると、‘저희’は‘우리’を低めたことばであるが、その意味に聞き手を含まないという点で‘우리’とは異なる。

１人称単数
나（na）：１人称の基本形である。話者と聞き手の関係が同等であるときのみならず、聞き手の位置が低いパンマルの場合にも使う。
저（jeo）：聞き手が話し手より目上の人である場合には‘나’の代わりに‘저’を使い、自分を低めることにより聞き手を高める。
１人称複数
우리（uri）：‘나’と同じレベルで、その一人称複数形である。複数であることを強調するために‘우리’に‘-들’を付けて使うこともある。
저희（jeohui）：‘저’と同じレベルで、その複数形であり‘우리’を低めた言葉である。しかし‘우리’と違って‘저희’には聞き手が含まれていない。
白（2004：50）

「韓国語対談番組コーパス」で発話された一人称複数代名詞には、‘우리’が 655 例、‘저희’が 277 例あった。本発表では、聞き手を含む場合と含まない場合のいずれかに分類できた用例のみを扱っている。

5．視線表現

発話場面の映像から話し手の視線がどこに向かっているかの判断が可能だった場合にかぎって、そのありかを調べた。話し手の視線表現の中で、特に注目したのは、一人称複数代名詞を発話するときである。

本発表では、一人称複数代名詞（言語表現）の意味に聞き手が含まれていることと、視線（非言語表現）を聞き手に向けることとの関連性を探るため、そのときの、話し手の視線表現を、大きく、「聞き手を見る」と「聞き手以外を見る」に二分類している。

6．調査結果

４と５の方法により用例を限定したところ、最終的に分析に用いることができたのは、「一人称単数＋タチ・ラ」の 148 例、「ワレワレ」の 61 例、「ワタシドモ」の２例、‘우리’の 204 例、‘저희’の 81 例である。

まずは、日本語の場合について述べる。**表１**は、代名詞の意味を、聞き手を基準に二分類し、その発話時における話し手の視線を調べ、その結果を代名詞の種類別にまとめたものである。

表１　日本語の一人称複数代名詞別、単語の意味と視線表現

「聞き手を見る」の比率 ／ 代名詞の意味	「一人称単数＋タチ・ラ」	「ワレワレ」	「ワタシドモ」
聞き手を含む	55%（ 42/ 76）	61%（ 11/ 18）	－　（ 0/ 0）
聞き手を含まない	25%（ 18/ 72）	37%（ 16/ 43）	－　（ 0/ 2）

用例数の極端に少ない「ワタシドモ」を除き、比率を記している「一人称単数＋タチ・ラ」と「ワレワレ」に注目すると、一人称複数代名詞の発話時に話し手の視線は常に同じ比率では分布していない。そして、両者とも、（多少の差はあるものの）単語の意味に聞き手を含む場合ほど、そうでない場合

に比べて、話し手の視線が高い確率で聞き手に向けられている。

次に、**表2**では、韓国語の‘우리’と‘저희’に関する調査結果を示す。

表2　韓国語の一人称複数代名詞別、単語の意味と視線表現

「聞き手を見る」の比率 ＼ 代名詞の意味	‘우리’	‘저희’
聞き手を含む	93%（ 82/ 88）	―　（ 0/ 0）
聞き手を含まない	58%（ 68/116）	88%（ 71/ 81）

‘저희’は、この単語の特質上、聞き手を含まない場合の用例しかないため、単語内の意味の違いによる比較はできない。だが、「聞き手を含まない」場合の‘저희’と‘우리’は比べられる。その比率に注目してみると、‘우리’では58%に、‘저희’では88%になっている。‘저희’の数値は、むしろ‘우리’の「聞き手を含む」に近く、同じ韓国語でも、‘우리’と‘저희’とでは、話し手の視線表現に相違があるといえる。

最後に、**表3**では、類似した傾向が観察された**表1**の「一人称単数＋タチ・ラ」「ワレワレ」と、**表2**の‘우리’を併記し、比較してみることにする。

表3　日本語と韓国語の一人称複数代名詞別、単語の意味と視線表現

「聞き手を見る」の比率 ＼ 代名詞の意味	日本語		韓国語
	「一人称単数＋タチ・ラ」	「ワレワレ」	‘우리’
聞き手を含む	55%（ 42/ 76）	61%（ 11/ 18）	93%（ 82/ 88）
聞き手を含まない	25%（ 18/ 72）	37%（ 16/ 43）	58%（ 68/116）

表をみると、三者とも、「聞き手を含む」のほうで、聞き手を見る確率が高くなっている。だが、その確率は、「一人称単数＋タチ・ラ」と「ワレワレ」

ではそれぞれ 55% と 61% に、‘우리’では 93% になっており、日本語と韓国語の場合で分布の様相が異なっている。

7．まとめ

視線分布の様相は異なるものの、単語の意味に聞き手が含まれているときほど高い確率で話し手の視線が聞き手に向かうという点において、「一人称単数＋タチ･ラ」と「ワレワレ」､そして‘우리’は共通している。それに対し、‘저희’は、これらの場合とは傾向が異なっている。

それでは、なぜ一人称複数代名詞は、その種類によって発話時における視線表現に異同があるのだろうか。その理由については、さまざまな観点から考察できると思うが、ここでは、単語の意味からみた説明の可能性についてのみ考察してみたい。

「一人称単数＋タチ・ラ」･「ワレワレ」･‘우리’は、その意味に聞き手を含むことも含まないことも選択可能な単語である。これを、話し手の側から捉えれば、これらの単語とは、伝え方によって話し手の意図と異なる対象を聞き手に想定させる可能性が十分にある語であるという点で共通する。

そして単語の意味に聞き手が含まれているときほど高い確率で聞き手に視線を向けていることから、話し手は、聞き手に視線を向ける行為に、なんらかの機能を伴わせていると考えられる。この場合、その機能とは、一人称複数代名詞の意味に聞き手が含まれているのを聞き手本人に伝えること、と解釈するのが自然であるだろう。つまり、話し手は、聞き手を含むときには聞き手に視線を向けることで単語の意味に聞き手が含まれていることを、そうでないときには聞き手から視線を外すことで聞き手が含まれていないことを、積極的に伝えていると考えられる。

それに対し、‘저희’は、上述したように、聞き手を含まない場合にしか用いられない。つまり、‘저희’は、他の代名詞と違って、その意味に聞き手を含むか含まないかの選択が不可能で、話し手の意図と異なる対象を聞き手に想定させる可能性が低い語である。このことは、話し手にとっても、意味の違いにより積極的に視線表現を使い分ける必然性がないことを示唆し、その

ため、‘저희’の場合からは、「一人称単数＋タチ・ラ」・「ワレワレ」・‘우리’とは異なった傾向が現れていると推測される。

こうして単語の意味と視線表現とを関連づけると、発話時における話し手の視線表現の異同から、日本語と韓国語における一人称複数代名詞は、**表4**のようにグループ化できる。

表4　視線表現の異同による、一人称複数代名詞のグループ化

意味に「聞き手」を含むことの選択が可能な語
（「一人称単数＋タチ・ラ」、「ワレワレ」、‘우리’）
：話し手の視線は、単語の意味に聞き手が含まれているときには聞き手に、聞き手が含まれていないときには聞き手以外のところに向けられる確率が高い。

意味に「聞き手」を含むことの選択が不可能な語
（‘저희’）
：話し手の視線は、常に高い確率で聞き手に向けられる。

孫（2014）は、「一人称単数＋タチ・ラ」を対象に調べ単語の意味によって話し手の視線表現が変わる可能性を指摘したが、**表4**から、単語の意味による視線表現の変動は「一人称単数＋タチ・ラ」にかぎらないということが、検証できたと考える。ただし、一人称複数代名詞の種類によって違いがあるなど、その実態は、孫（2014）よりも複雑である。

課題はあるものの、本発表で見出した傾向は、単語の意味が、日本語と韓国語という言語の違いに関わらず話し手の視線表現に変動を与える要素として働いていることを示唆するもので、これによって、単語単位から言語行動を調査・分析することが有用であることは実証できたと考える。今後は、多様な言語・非言語項目を対象に考察を重ねていくことで、単語単位にもとづく言語行動研究の有用性をより積極的に実証したい。

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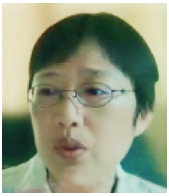
民主化移行期の台湾にとって明治維新とは何か：脱植民地化と民主化プロセスの交錯



序論

明治維新は、19 世紀後半の日本における近代化改革であり、東アジアでは「成功」した改革として認識されることが多い。しかし、その評価は改革に対する欲求や立場によって異なる。

第二次世界大戦後、台湾は、中華民国を主導する中国国民党（国民党）政権によって支配され、国民党政権は「中国」ナショナリズムを公定ナショナリズムとして中国化政策を推進した。これにより、明治維新は、日清両国の近代化の比較対象とされ、時には反日感情から帝国主義の先駆けと見なされることもあった（楊素霞 2019.12:36-53）。戦後台湾では、日本からの脱植民地化が国民党政権によって「代行」され（若林正丈 2007:207-221）、その結果、「明治維新」認識は中国ナショナリズムの枠組みに束縛された。

1970 年代以降、中華民国の国連脱退や西側諸国の中華人民共和国への接近などにより、中華民国の正統性が疑問視され、国民党政権は「中華民国台湾化」を推進した（若林正丈 2008）。さらに、美麗島事件（1979）を契機とする「台湾」ナショナリズムの高まりと民主化運動の進展に伴い、脱植民地化が台湾主体で進められた（蕭阿勤 2015:177-203、呉乃徳 2020）。このような中で、明治維新認識が問い直されることとなった。

論文「戦後台湾における明治維新をめぐる言説の編成」では、戦後の「明治維新」を題目に含む諸学術誌論文の分析を通じて、明治維新の問題点を、台湾を主体とする国民国家の形成の鏡として捉えようとする新しい動きや、日本植民地期の台湾史研究の文脈から明治維新を探究する論考が学界から出てきたことが考察されている（楊素霞 2019.12:53-59）。

しかし、以下の二つの問題点がある。第一に、日本語世代の見解が検討されていない点である。この世代の集合的認識は戦後派のものとは異なるためである。第二に、明治維新を主題とする書籍の考察が欠けている点である。

これらの書籍は、出版市場の利益至上原理が働き、台湾社会の明治維新認識の形成に大きな影響を与えていると推測される。

そこで、本稿では、民主化運動が起こり始めた 1970 年代後半から、国民党から民進党への政権交代で一定の成果が得られた 2000 年に至るまでの期間において、台湾における明治維新認識が脱植民地化と民主化が交錯する中でどのように再構築されたのかを明らかにする。

1．日本語世代

まず、日本語世代による自伝や回想録の分析を通じて、この世代の明治維新認識を考察する。12 名 の中で、明治維新に関する自らの認識を明示したのは、東京帝大出身の張有忠・朱昭陽・陳逸松の 3 名のみである。

張有忠は、江戸幕府と近代日本をそれぞれ「鎖国」的な「単一民族国家」と、多民族からなる「開国」的な植民地帝国として対比し、明治維新による日本の変化を評価している（張有忠 1989:25、29-30）。朱昭陽は、麻布中学校長・江原素六が維新志士であったと評価し、東京帝大在学中に「大学自治」が「明治維新以来」強力になってきた官僚支配や学問の自由侵害を防いだと説いている（朱昭陽口述 1994:19、30）。

一方、陳逸松の明治維新認識は、専門性と社会性を兼ね備えた点が特徴的である。彼は、第六高等学校の社会科学研究会や東京帝大法科大学生を中心とする新人会などの左派団体と交流していた（陳逸松口述 1994:94、101-112）。そこで、「明治維新時」にも「部落民」が差別され続けていたと指摘し、皇民化運動期の改姓名運動を「明治維新以後」の苗字許可と対比させながらも、台湾では姓が血脈継承の象徴として改変できないと非難した（陳逸松口述 1994:94、227-228）。また、近代日本の帝国主義的侵略行動を「明治維新以来」の西欧化の延長として批判的に捉えている（陳逸松口述 1994:119-122）。

これらの 3 名の明治維新認識は私的な体験から得られたものでしかなく、日本語世代の彼 / 彼女らは、必ずしも一貫性や共通性のある明治維新認識を示してはいなかった。これには、1920 年代後期以降に台湾議会設置請願運

動を主導する台湾文化協会の左傾化と、社会経済的問題への関心の移行が関わっている。この動きにより、明治維新期の立憲過程の歴史を、同運動の正当性を強化する素材として使用することはなくなかった（楊素霞 2022.1）。さらに、1930 年代以降の軍国主義の台頭により、彼 / 彼女らは忠君愛国精神に束縛され、「抵抗」や「変革」を進める社会的状況に恵まれなかった。その結果、明治維新に対する共通認識の形成は困難であった。

しかし、一部の論者は、植民地統治を明治維新による近代化の成果として連結的に評価した（蔡焜燦 2000:34、陳五福口述 1996:11）。この認識は、特に 1990 年代以降の日本語世代による回想を通じて、皇民化運動期の日本人アイデンティティの構築と、戦後の美化された日本観の形成と深く関わっている。

日本内地人との差異をあまり感じなかった者（柯旗化 1992:25）や、日本人であることを自負する者（呉月娥 1999:249、蔡焜燦 2000）、忠君愛国精神や万世一系の天皇観や教育勅語を身に付けた者（磯村生得著・李英茂 1996:15、林歳徳 1994:78、張有忠 1989:33-34、蔡焜燦 2000）などが多かった。第二次日中戦争勃発以降、多くの人々が皇民化運動に巻き込まれ、皇民奉公会や改姓名などを通じて影響を受けていた。さらに、公・小学校から国民学校への改組や徴兵制の実施なども加わり、制度的な民族的境界線や差別も次第に消失していった（周婉窈 2009）。結果的に、日本人アイデンティティが創出されるという逆説的な効果が生まれた。

戦後、多くの日本語世代の人々は、国民党政権の権威主義的支配を日本植民地統治と比較し、自らの「台湾人」アイデンティティを構築する中で、誠実さや奉公、勤勉さを植民地統治の影響として称賛していた。

2．学術研究の場合―学術雑誌論文を通じて

日本語世代とは異なり、日本研究者と台湾研究者は、明治維新に関する学術的考察を行っている。憲法学者の李鴻禧は、大日本帝国憲法体制を明治維新の成果としつつも、統治権の乱用が基本的人権の確保を妨げ、民主政に支障を来したと指摘している（李鴻禧：1978.3）。これは、民主化運動が進行

する中で、李が中華民国憲法体制の問題点を明らかにしようとした試みと考えられる。

日本史学者の李永熾は、明治維新で日本人が国との一体感を形成したものの、完全な理性的「近代国民」にはなれなかったと述べ、台湾が「先進工業国」となるためには、明治維新で生まれた歪みを鏡として学ぶべきだと主張している（李永熾：1994.8）。この主張には、1980 年代以降に彼が台湾を主体とする「近代国家」のあり方を探究する背景がある（李永熾口述 2019:390-404、433-441、452-540）。

両名とも、明治維新の問題を、台湾主体の民主的な国民国家建設の参考にすべきだと論じており、彼らの研究経緯や民主化運動への関与と密接に関連している。

彼らは当時オーソドックスであった中国研究から距離を置き、日本研究に取り組むようになった。李鴻禧は、天皇機関説事件（1935）での美濃部達吉の毅然とした態度に感銘を受け、法律学科への進学を決意した。台湾大学在籍中には戦前の日本憲法学者の著作を通じて大日本帝国憲法を基に比較憲法学を研究し、その後東京大学大学院で憲法学研究をさらに深化させた（李鴻禧 2013: 190-192、196-198、218-228）。

李永熾は、台大歴史学科で明治維新史研究者の森谷秀亮の授業から影響を受け、大学院進学後に日本近代史を専攻することを決めた（李永熾 2013:135、李永熾口述 2019:139）。彼は、『福沢全集』などの史料を用い、福沢の啓蒙思想に関する修士論文を完成させた（李永熾 1968:「弁言」1-4、2013:135-136）。その後、東大大学院在学中には、マックス・ヴェーバーや大塚久雄、丸山真男の研究を通じて「近代」を再考した（李永熾口述 2019:190-239）。

両名は、1970、80 年代から、国民党と民進党から一定の距離を保ちながら民主化運動に参加し（陳儀深訪問・林志晟等記録 2013:129-131、李永熾口述 2019:336-540）、民主的な国民国家台湾の建設を目指し、明治維新の未完の課題を反面教師として参考にすべきだと説いていた。

1990 年代には台湾史研究にも取り組み、特に李鴻禧は、日本植民地期から約百年間の台湾における法治の発展を本格的に研究した（李鴻禧 1997、

李永熾 2008)。彼らの研究関心の変化は、当時台湾ナショナリティの形成や、台湾史が中国の辺境史または地方史からナショナル・ヒストリーとして再構築されることと密接に関連していた（蕭阿勤 2015:291-294)。

李鴻禧による「台湾法律史」研究は、学問体系の構築において先駆的と評され（王泰升 1997:163)、台湾法律史研究者たちに継承された。また、1990 年代以降、植民地近代性というコンセプトを用いて植民地台湾の近代を再考する研究者が増え（張隆志 2004:150-160)、多くの研究者が明治維新を客観的に見直そうとする傾向が見られる。ただし、研究の視点や関心によって明治維新の捉え方は一律ではない。

3．書籍出版市場の場合

日本語世代や学術研究者を問わず、明治維新認識は、民主化運動の進展に伴い台湾主体性の構築というニーズに基づいていた。一方で、出版市場における書籍は、そのニーズとは関係がなく、むしろ大衆性や市場性に依存していた。

台湾人による明治維新を題名に含む書籍としては、姚大中『日本天皇制研究與明治維新』、呂理州『明治維新：日本邁向現代化的歷程』、七徐二『維新・英雄・風雲變』が挙げられる。

中国史研究者の姚は、明治維新後の近代日本が帝国主義に進む原因として、王政復古によって七世紀後半から続いた専制的な君主を権力の中心に戻したことを指摘している（姚大中 1988:176、189-191)。

それとは対照的に、呂理州や七徐二の著作は興味本位的に映る。二人とも、出版社勤務の経験を持つ在野の論者で、明治維新の詳細を叙述しつつ、その末尾で日清両国の近代化を比較している（呂理州 1994:「自序」、271-293、七徐二 1996:「作者簡介」、143-144)。この比較論は、従来の明治維新認識でよく用いられる手法だが、七徐二は、自分が受けてきた歴史教育で日本が常に禍の元とされていたとし、すべての経緯を知ると清朝の悪行こそ同情に値しない、と慨嘆している（七徐二 1996:143-144)。このように、両名の論は中国イデオロギー性からの脱却を試みている。

21 世紀の台湾出版市場では、明治維新関連書籍が急増し、エンタメ性や通俗性が強まった。1994 年の日本文化の全面解禁により、「哈日ブーム」（日本マニアブーム）が起こった（李衣雲 2017）。さらに、2002 年の台湾の世界貿易機関加盟に伴い、出版市場の自由化やグローバル化が進んだ。これらの変化により、明治維新関連書籍は市場で注目を集めるようになった。具体的な書籍を挙げることはしないが、上記の二人の著作はその先駆的存在と言える。

結論

以上のように、日本語世代や、日本研究者・台湾史研究者による明治維新認識はいずれも、国民国家台湾の主体性構築というニーズから生じていた。日本語世代は、植民地統治を明治維新による近代的成果と見なしているのに対して、日本研究者は、民主化運動への参加過程で、明治維新で未完だった諸課題を、国民国家台湾を建設する際に鏡にすべきだと主張している。それを継承する形で、台湾史研究者は、ナショナル・ヒストリーとしての台湾史の植民地期の部分を研究する中で、明治維新を重要な前提と位置付けている。一方、このニーズとは関係がなく、娯楽性・通俗性の色彩を帯びた明治維新関連図書も出版されている。

以上の明治維新認識の多様性は、中国ナショナリズムの脱却と深く関わっている。しかし、明治維新は文脈ごとに断片的に捉えられ、戦後台湾における日本近代史研究の低迷や学術研究の細分化も影響し、構造的な探究が欠けることとなった。

21 世紀に入っても、日本語世代の語りを通じた連結的な明治維新認識が広く社会に受容・継承され、台湾史研究の発展や一般書の継続的な出版が影響し、現在も続いている。

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（3）澤田 ゆかり（東京外国語大学総合国際学研究院教授）コメント

1．孫栄奭氏へのコメントと質問

ことわざにある「目は口ほどにものを言う」をあげるまでもなく、コミュニケーションにおいて視線が重要な役割を果たすのは、経験的に実感できる。非言語コミュニケーション（non-verbal communication）において、視線がどのような役割を果たすのかという課題については、先行研究で成果が蓄積されている。

これに対して本研究は、まず言葉の意味に着目する。そのうえで、独立した単語の持つ意地が視線にどう働きかけるのか、を分析する。いいかえれば、言葉が視線を支配する現象を解明するのが本研究の目的である。この逆転の発想はそれだけでも興味深い。

また本報告は、総計 60 時間におよぶ独自のマルチメディア・コーパスを構築している。この点で、資料的な価値を実現したことがまず高く評価できる。

第二の評価すべき点は、視線が単語の「意味」に反応していることを証明するために、複数の言語（ここでは韓国語と日本語）を利用するというアイディアである。孫氏の前作を延長すれば、日本語から「私たち」以外の「一人称複数代名詞」を取り出して、同様の調査を行えばよい（実際に著者は今回の研究報告で、その作業を行なっている）のだが、著者はここで満足せず、韓国語という別の言語にも対象を広げて検証を重ねた。この工夫により、本研究は従前にくらべて「意味」の内容を多角的に分析できるようになった。しかも言語の種類を増やすことでコーパスの蓄積を容易するとともに、日本語研究にとどまらず、非言語コミュニケーションの世界比較を可能にしている。

評者が本研究報告を読んですぐ思い至ったのは、中国語の一人称複数代名詞である「我們（wǒ men）」と「咱們」（zán men）である。ここから聞き手との距離感の差が含意を決定し、それが視線の方向に影響を考えると、考

えられる。その意味で、著者が「利用例が極端に少ない『ワタシドモ』を除」かざるを得なかったのは残念である。データ処理の面からいえば、著者の判断は間違っていない。しかし「ワタシドモ」は、他の一人称複数代名詞と異なって、聞き手の立場を高めるために自らを下に置く謙譲の作用があるように思える。もしそうだとすると、聞き手を含まない「저희（jeohui）」に近いといえる。

著者によれば、「저희（jeohui）」は聞き手が話し手よりも目上の人である場合には、一人称の基本形である나（na）ではなく、저（jeo）を使って、「自分を低めることにより聞き手を高める」（p.5）とある。そして孫氏の研究結果によれば、聞き手を含まない「저희（jeohui）」を用いる場合は、高い確率（88%）で視線が聞き手に向けられる。ところが日本語の一人称複数代名詞と우리（uri）の場合は、これとは逆に逆に聞き手を含む場面において、視線は聞き手に向けられる。この理由について、孫氏は前者においては聞き手を含まないことが自明であるために、視線を動かす必要がなかったことを示唆している。この点を裏付けるのに「저희（jeohui）」に近いと思われる「ワタシドモ」による検証は有効な手段ではないだろうか。

質問は、以下のとおりである。

⑴上記で提起した「ワタシドモ」による視線の検証についてどう考えるか。「謙譲」と「親しみ」の距離感は、言語の意味と視線の方向を条件づけるかどうか、現時点の見解を伺いたい。
⑵聞き手と話し手の立場に作用する非言語的要素について：視線の方向に影響を与える性別や年齢によって異なるか？
⑶データの規模について：個人で構築したコーパスのため規模が小さいように思われるが、対策はあるか？
⑷方法について：日韓のコーパスとなるテレビ番組を選んだ基準は何か。たとえば多くの場面を含むようにランダムに選択したのか？
⑸資料の公開について：今回のコーパスは社会に広く公開して第三者による利用を許可する予定があるか。あるいは技術的に不必要なのか（テレビで

公開された資料を利用しており、自動文字生成が無料アプリでも可能なため、など)。

2．楊素霞氏へのコメントと質問

本研究は手堅い文献調査に基づいており、明治維新のメタ研究の形をとりながら、台湾の民主化時代の証言集としても有意義である。また結論を引き出す際には、3区分で無理に線引きせずに、同じ日本語世代の中にも明治維新に対して異なる見解があったことや、通俗書での描き方も一律ではないことがわかるように、慎重な姿勢を守っている。これは楊氏の誠実さの現れであり、その意味で好感がもてる。

しかし、そのために3区分の意義が伝わりにくくなっていることは指摘せざるをえない。特に「学術研究者」の項目に比べて、「日本語世代」と「通俗書」が示す明治維新像をどう楊氏がとらえているのかが、わかりづらい。もし楊氏が主張するように、3つの区分のうち「日本語世代」と「通俗書」を取り上げたことが、先行研究と異なる今回の論考の特徴であるのならば、この二者が何を示しているのかを明示する必要があろう。

対応方法としては、(1)これまでの台湾の脱植民地化と民主化に関わる研究において、「日本語世代」と「戦後世代」はどのように位置付けられてきたのか、(2)本研究が「明治維新」への評価を介することで、そうした位置付けは再考を迫られているのか(あるいは強化されたのか)を記述すればよいと考える。

もう一点、今後の加筆・修正に向けて、今回の研究結果をもう一回り大きな枠組のなかに据えることを勧めたい。今回の研究から得た知見は、脱植民地化、民主化という普遍的なテーマにさまざまな面で貢献できよう。

たとえば明治維新を「非欧米圏における近代化の成果」として評価する動きと中国／台湾ナショナリズムとの反発／連動の関係は、現在も多くの地域で参照する価値があろう。21 世紀に入ると、グローバル・サウスでは中国の経済成長を自国が学ぶべきモデルとして肯定的にとらえる国が増えてきた。それが当該地域のナショナリズムとどのような反発･連動するのかといっ

た枠が考えられる。

また懐古による過去の美化がもらたすナショナリズムと政治的影響も、今日の世界的な課題である。トランプのMAGA（Make America Great Again）に限らず、既存の体制に挑み破壊する力は、しばしば変革を古いイメージの糖衣で包んで、飲み込みやすくしていた。まさに明治維新が「王制復古」であったことが想起される。

【質問１】

著者が結論で主張しているのは、台湾における政治的環境の変化（中国ナショナリズムの脱却／台湾ナショナリズムの高まり、民主化運動の進展）が、「明治維新」という歴史的事象の認識／解釈に反映されている、という理解でよいか。あるいは逆のベクトル（明治維新に関する認識が政治的環境に作用して変化をもたらす）も含めた相互作用を意識しているのか？

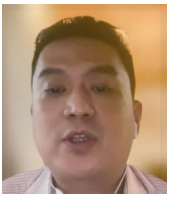
【質問２】

もし相互作用を意識しているのであれば、３．でとりあげた「娯楽性・通俗性の色彩を帯びた明治維新関連の図書」は、政治的環境にどのような役割を果たしたのか？学術書と比べると、その影響力は大きかったのか？読者層／購買層はどのような人々か？また楊氏が踏み込まなかった「哈日ブーム」の日本文化と比べると、影響力は大きかったのか？それとも影響力は小さかったが、その後の「先駆者」という位置付けが重要なのか。

【質問３】

３．の「中国イデオロギー性からの脱却」とは、「中国ナショナリズムの束縛からの脱却」という意味か？それとも「イデオロギー性」という表現には、それ以上の意味があるのか？

3 Session 2 (English): Understanding Japanese Experiences for the Sustainable Development



(4) Erwin Gaspar Alday ALAMPAY (Professor, National College of Public Administration and Governance, University of the Philippines Diliman)

Comparative Study on Disaster Related Corporate Social Responsibility (CSR) Project Implementation in Local Government in Japan and in The Philippines

1. Introduction

Japan and the Philippines share common challenges with respect to both natural and human induced disasters. Both have recovered from disasters through the efforts of its government and private sector. This paper discusses the case of both countries with respect to Corporate Social Responsibility (CSR). It seeks to understand how government and corporations respond and work together to recover from disasters, and in particular with respect to the Covid-19 pandemic. By comparing and contrasting the two countries' practices, the study contributes to the body of knowledge on the different CSR dynamics in Asian countries.

2. Literature Review

Corporate Social Responsibility (CSR) practices has been expanding and evolving in recent decades around the world. Partly, it is due to shifting stakeholder expectations, and international companies' exposure of its operations in other countries (Lewin; Tomoaki, Stephens and Victor, 1995). However, while it has gained

importance, it was not well-defined, and prone various interpretations, and often not significantly affecting the company's operations (Welford 2004). In 2010, the International Organization for Standards (ISO) came up with rules specific to defining social responsibility which leads to the development of ISO 26000 (ISO 2010).

Expectations for businesses to undertake a greater role in social development has grown. Global warming and serious environmental problems raised the importance of sustainable development amidst corporate profits. In this regard, ISO 26000 offers more than 450 recommendations related to the attainment of sustainable development goals (SDGs) (ISO 2018). Emphasis has moved towards more partnership-building rather than the practice of resource-transferring from corporations to beneficiaries (Asian Institute of Management RVR Center for Corporate Responsibility, 2005). This has provided an opportunity for governments to promote sustainable development by 'actively seek broad partnerships with civil society and the private sector' (OECD, 2001).

The practice CSR can benefit a company's: competitive advantage; reputation, ability to attract and retain workers; influence employee morale and commitment; view of stakeholders; and its relationships with other companies, governments and the community it operates in (ISO 2010:vi). In other words, CSR can simultaneously increase firm success, reduce negative social influence and benefit society. The growing interest in the strategic implementation of CSR in companies is because it is value-creating to the financial bottom-line (see Carroll and Shabana 2010; Vishwanathan et al. 2020).

The subsequent section discusses the definition of CSR in the literature and how it differs in the Philippines and Japan, how they are practiced, and frameworks for classification.

Definition of Corporate Social Responsibility

Corporate Social Responsibility (CSR) is considered as a representation of an organization's continuing commitment to behave ethically and contribute to econom-

ic development, while improving the quality of life of its employees, the local community, and society at large (Watts and Holme 1999 as cited in Lindgreen and Swaen 2010:5). The concept continues to evolve depending upon its implementers' and practitioners' understanding (Lindgreen and Swaen 2010). Social responsibility is defined as the "responsibility of an organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behavior that contributes to sustainable development; takes into account the expectations of stakeholders; is in compliance with applicable law and consistent with international norms of behaviors, and is integrated throughout the organization and practiced in its relationships." (ISO 2010:3)

CSR has various aspects that can be measured, along with contextual and cultural dimensions to consider. It also focuses on a wide range of issues at the global level. Welford (2004, 33-34), for one, identified 20 CSR policy areas derived from various conventions that can be categorized to four elements: 1) Internal Aspects; 2) External Aspects; 3) Accountability; and 4) Citizenship. ISO 26000, on the other hand, mentions seven core subjects that encompass social responsibility: 1) organizational governance; 2) Human rights; 3) Labour practices; 4) the environment; 5) fair operating practices; 6) consumer issues; and 7) Community involvement and development (ISO 2010). For a company to be socially responsible means it balances the economic imperative for profit, social responsibilities to people, and environmental considerations for the planet, also referred to as the "triple bottom line"(Kuroda and Ishida 2017). The trends in CSR may also vary. Focus of CSR policies in Asia, for instance, has been different to Europe, particularly with respect to having less policies on internal aspects, although comparable if not higher on external aspects, such as local protection and labor standards (Welford 2004).

CSR Classifications and typologies

CSR is also classified into three orientations based on the corporation's strategic goals. These are (1) **philanthropic CSR** which entails a charitable donor– recipient

relationship, (2) **promotional CSR** which enhances mutually beneficial relationship exchanges; and (3) **value-creating CSR** which integrates into the firms' mission and core business agenda (Austin, 2000; Pirsch et al., 2007; Varadarajan and Menon, 1998, as cited in Chen et al., 2018).

Philanthropic CSR involves charitable acts to society. It represents firms' one-way donation behaviors (Dean, 2003, as cited in Chen et al., 2018). Promotional CSR focuses on achieving promotion effectiveness and are associated with short-term sales goals (Pirsch et al., 2007). CSR is used as a public relations opportunity to enhance the brand, image, and reputation of the company. It is oriented towards short-term profitability and brand image (Chen et al., 2018). Lastly, value-creating CSR focuses on creating shared value among customers and stakeholders by merging consumer welfare, business goals and long-term societal benefits (Peloza and Shang, 2011, as cited in Chen et al., 2018). They try to align corporate mission and social causes in enhancing corporate competitiveness (Chen et al., 2018). Value-creation CSR involves adherence to the company's corporate mission and social causes while providing opportunities for innovation.

A three-generation CSR typology are also used by some to describe CSR activities. **First-generation CSR** is concerned with the functioning of the organization itself and therefore only the most central, organizationally linked stakeholders are in focus (Aggerholm & Trapp, 2014). They focus on "upholding law and order, and protecting individuals from organizational misdeeds such as ensuring that suppliers comply with a company's code of conduct" (p.4). They are often embedded within a national context and centered on government-related activities.

Second-generation CSR focus in particular national contexts but is more inclusive in reflecting the broader understanding of relevant stakeholders. They involve initiatives concerned with issues that can be directly influenced by an organization for the benefit of its stakeholders. It may also target local communities and families of staff rather than just company-specific employees or stakeholders (e.g. sponsoring events; promoting safe workplaces) (Aggerholm & Trapp, 2014: p4).

Third-generation CSR is concerned with the international community, tran-

scending corporate, local, and national boundaries, and is embedded in a global context. The domain of third-generation CSR transgresses individual companies and is embedded in a global conglomeration of actors from one or more sectors (Aggerholm & Trapp, 2014). Examples of third-generation CSR are activities concerned with issues such as abolition of child labor, and environmental responsibility and sustainable development.

CSR and the pandemic

In 2020, the Covid-19 pandemic also influenced the focus of CSR, such as marketing (He and Harris 2020) or other dimensions that impact stakeholders (Marom and Lussier 2020). It provided opportunities to help control the spread of the disease by providing products, manufacturing and logistical support, funds, and other services (Marrom and Lussier 2020).

Others also recognize that a crisis has an impact on global governance as a whole, whether to accelerate, slowdown or reverse trends, and in relation to CSR, may lead to decline in state regulation and rise of private, voluntary and disclosure-based governance (Levy 2020). The type of support and needs, vary from country to country, depending on the severity of the outbreak, state capacity, and types of interventions and regulations put in place. For instance, CSR may cover obligations to employees on maintaining a safe workplace; salary obligations for business shutdown; adjustments in workdays/hours; policies in workforce reductions; and work from home arrangements (Baker Mackenzie 2020). However, it can also lead to companies cutting back on CSR related activities because of Covid-related restrictions (Tokyo Foundation 2021).

This paper compares the experience of the Philippines and Japan. Both countries are in the Asia-Pacific, have similar populations, but with different state capabilities and responses during the pandemic. In comparing the CSR activities in the two, the frameworks previously mentioned (orientation and generation) was applied to categorize their CSR initiatives.

3. Methodology

The study was based primarily on online resources. This was also limited to English-based websites and content. The content of the articles was then thematically analyzed.

In the Philippines, there was a non-randomized survey participated in by twenty respondents, some of whom directly oversaw the CSR programs of the companies, or were Human Resource personnel. The Japanese survey, unfortunately, yielded very few responses. In its stead, data from an annual series of CSR surveys conducted by Tokyo Foundation was used to make a comparison of the two countries. In comparing the two cases, the typologies discussed in the literature was applied as an organizing framework and point of comparison.

4. Corporate Social Responsibility in Japan

Awareness has increased in Japan about CSR. While historically, Japanese firms were not concerned with corporate citizenship, this has seen a gradual change over time, starting with increasing exposure of its firms to various corporate financial norms across nations (Lewin et.al. 1995). Kuroda and Ishida (2017), says that the concept of CSR has been embraced by the private sector, and historically, external stakeholders have had a limited role in it (see also Lewin, et.al. 1995). In more recent years, external stakeholders have become more engaged with businesses in promoting it.

Prior to the turn of the century, Lewin et.al. (1995) noted that based on a JPC baseline survey, norms of corporate citizenship were only starting to get traction in Japan, with awareness higher in larger firms. Back then, Japanese CSR efforts focused more on internal stakeholders, and local issues. An example of internal focus among Japanese firms pertain to occupational safety and health (Wokuch 2014), providing lifetime employment and advancing training skills (Fukukawa and Moon, 2004 as cited in Levermore 2014).

By the early 2000s, there was more widespread adoption of CSR practices among Japanese companies (Albrecht and Greenwald 2014). The country's private sector showed its commitment through more disclosures in CSR performance. In 2003, Japan housed the highest number of companies who published a report based on the Guidelines of GRI, the pioneer of corporate sustainability reporting system. Fukukawa & Moon (2004) explains this 'increase' in CSR practice in Japan was driven by: imperatives in Japanese society; influence of governmental organizations and business societies; and globalization. Relevant government ministries were involved in providing guidance on CSR issues in the country. With Japan having many international and multinational corporations, some 'global norms' translated into how some Japanese companies also report their CSR work (Levermore 2014).

But these are just the 'formal' label, as managers recognize that CSR values already existed and were reflected in corporate creeds or principles long before 2003. Some even say that unlike the US, Japanese make more extensive use of administrative guidance (gyosei-shido), rather than legal or administrative procedures (Lewin, et.al. 1995). Hence, Japanese occupational and safety regulation and concerns tend to be more collaborative than punitive (Wokutch 2014).

CSR Focus

Nakano (2007, as cited in Fukukawa and Teramoto 2008) sees the Japanese business as advocating "a corporate conscience-based governance with the establishment of a business ethics based upon the shared values of a corporation and its stakeholders." Hence, companies go beyond the legal framework to fulfill its responsibilities.

While CSR tends to be prescriptive, Japanese managers have a strong 'spirit' of compliance, rather than straightforward prescription (Fukukawa and Teramoto 2008:138). This 'prescription' is evolving. In some Japanese corporations, there is an understanding of a company as being a 'public' entity. For instance, the founders of Panasonic and Omron based the mission and business principles of their respective

companies as a public entity of society and was the basis of their CSR (Tanimoto, 2013).

In business ethics, the emergence of the Japanese concept of Kyosei became an organizing principle for business-society relations for some. Boardman and Kato (2003) say kyosei provides a view of CSR being "above (the) pursuit of profit in terms of respecting the interests of stakeholders and establishing harmonious relations with suppliers, competitors, and the natural environment" (p.326). It endorses a view of business ethics and CSR that encompasses local to global communities on top of corporate stakeholders (Wokutch and Shepard 1999, p.537).

Other studies on CSR among Japanese firms, point to sustainability being embraced, more than its international peers, while also seeing direct business benefits to these endeavors particular to the automotive industry (Albrecht and Greenwald 2014).

CSR and Disasters

When the Great East Japan Earthquake and the Fukushima Daiichi nuclear disaster wreaked havoc in 2011, many companies came up with CSR initiatives that targeted the needs specific to that disaster. Collaboration within the private business community attempted to coordinate resources and efforts to enhance efficiency by exploring collaboration with other sectors and institutions: individuals, hospitals, governments, and NGOs (Kurihara, 2014). Many companies provided help using core competencies, consistent with the notion of strategic CSR (Porter and Kramer, 2006 as cited in Wokutch 2014). From an institutional CSR perspective, 3/11 also induced more concern in Japan with enforcement of occupational safety and health regulations in the Fukushima meltdown aftermath (Wokutch 2014).

Japanese CSR Surveys[1]

Tokyo Foundation conducted a series of CSR surveys and studies since 2014 (see Kamei and Kuramochi 2017; Kamei 2016; Kamei 2015; Tokyo Foundation 2020). The white papers change in thematic focus yearly, but there has been no analysis made on how CSR has changed over time (Kamei and Kuramochi 2017).

The first survey was most comprehensive in analyzing differences among the companies. In 2013, it looked at the types of social issues companies involved itself in with respect to CSR and found that the largest category involved on the environment (67%), and least was with eradication of poverty/hunger (Kamei 2015). Environmental concerns were highest for both domestic and overseas Japanese companies, and for overseas companies CSR concerns/projects on child poverty and hunger were higher in overseas CSR than domestic ones (see Kamei 2015). This suggests sensitivities also to geographical contexts and circumstances in which companies operate. Companies may approach the issues differently, depending on the issue. They could develop their own programs, donate products, or money or participate in outside programs. In many issues, developing their own programs was most common among the companies surveyed.

In the second CSR survey, they found that Japanese companies base their understanding of current social issues almost solely on the perceptions of **internal stakeholders**, though sometimes these are supplemented by input from clients and business partners. This was similar to what Lewin, et.al. (1995) previously observed. In other words, there are few opportunities for feedback from the community and was not open to outside opinions.

Japanese CSR was also strategically integrated to the business it is. In the 'baseline' survey, they found high self-reporting of initiatives for two areas: (1) implementation as an outgrowth of the company's production, sales, hiring, or other business practices, such as efforts to reduce or purify the wastes and emissions re-

1 https://www.tkfd.or.jp/en/research/detail.php?id=306#5

sulting from their procurement and production processes, consideration for human rights, and moves to promote women to senior posts, and (2) use of the company's own products or services (e.g. the development of medicine for the treatment of rare diseases and development of new products using Fukushima-grown crops stigmatized because of the nuclear accident).

Often disclosed in Japanese CSR reports are snap shots of officers/employees participating in volunteer activities, without any explanation of the activities being undertaken in relation to the social issues or business relevance (Kamei 2015). Although previous surveys said Japanese companies have been trying to integrate CSR more into their core business, it also acknowledges that there's still a tendency among higher executives to equate it with corporate philanthropy that is divorced from its core business (Kamei and Kuramochi 2017).

In the 2015 Tokyo Foundation survey, most companies already had a dedicated CSR office (63%) or a unit assigned to it (30%), with only 7% having no unit in charge of it (Kamei and Kuramochi 2017). This suggests CSR becoming more institutionalized CSR and mature in Japan. In terms of the role of stakeholders in influencing the focus and practice of CSR in companies, **Figure 1** below from the 3rd CSR survey is informative.

High interest → Low interest

		Environmental pollution	Climate change	Human rights	Women's advancement	Ecosystem preservation	Aging	Local community	Disease prevention	Poverty, hunger	Other
Internal	Input from management	15%	14%	9%	18%	8%	11%	11%	6%	4%	4%
	Input from employees	12%	7%	16%	20%	7%	11%	12%	7%	4%	3%
	Input from investors	15%	16%	11%	19%	12%	7%	5%	6%	4%	4%
	Input from business partners	19%	14%	13%	7%	12%	10%	10%	5%	5%	6%
	Input from customers	17%	19%	13%	8%	9%	11%	10%	6%	3%	6%
	Initiatives of other companies	15%	14%	15%	16%	13%	9%	6%	4%	5%	3%
	Input from experts	14%	16%	16%	12%	15%	7%	7%	4%	5%	4%
	Input from NGOs, NPOs	13%	14%	14%	8%	15%	6%	12%	5%	9%	4%
	Media reports	13%	14%	12%	14%	11%	11%	7%	6%	8%	3%
	Industry standards	23%	20%	13%	10%	12%	6%	4%	4%	3%	4%
	International standards	19%	19%	16%	9%	13%	4%	4%	5%	7%	3%
External	Laws and regulations	21%	17%	19%	15%	9%	7%	3%	4%	2%	3%

■ Over 20% ■ Over 10% ■ 9%-5% □ 4% or less

Figure 1 Influences on how CSR Social Issues come into Companies' Attention (from Kamei and Kuramochi (Tokyo Foundation) 2017.

Since environmental pollution and climate change were among the more prominent CSR issues mentioned, it interesting how industry standards, laws, and international standards have played a significant role (>20%). These are external stakeholders. Although local community was relatively low in the interest reported, it can be argued that this is a local community concern, and are inputted by NGOs. The survey didn't explicitly consider (ask) the direct community as influencing these initiatives.

Corporate CSR Activities in Japan during the Pandemic

Although restrictions due to Covid compelled companies to cut back on CSR activities, it leads to opportunities for other initiatives (Tokyo Foundation 2021). **Table 1** shows some of the diversity in the CSR activities that was done in Japan during the pandemic. Many third-generation types of CSR initiatives are found, highlighting the nature of Japan having many 'global' corporations.

Third Generation CSR

While we haven't touched on issues in the workplace, community outreach CSR is also related to immediate problems during the pandemic which might be context-based. If ever Japanese help with safety equipment, it would be in the context of helping in other countries and not just in Japan. For food donations, some companies also provided these for medical frontliners (e.g. Ajinomoto).

Table 1 CSR Initiatives of Japanese Corporations related to COVID-19, 2020

Company	Activity	CSR Category	CSR Generation
Sony	Global Relief Fund	Philanthropic (social)	Third-generation
Sony	US$10 million for frontline and first responders	Philanthropic (social - health)	Third-generation
Sony	Digital Learning Platform	Value-creating (social-education)	Third-generation
Sony	Play At Home Initiative	Promotional (social)	Second-generation
Beam Suntory	Neutral alcohol, bottles and compounding hand sanitizers for hospitals	Value-creating (social-health)	Third-generation
Beam Suntory	US$1 million to support the bar and restaurant community as a result of restaurant and bar closures	Philanthropic / Promotional	Second-generation
Toyota	Production and sale of Shodoku Taishi a foot-operated sanitizer stand.	Promotional (economic-business)	Second-generation
KDDI, Softbank, Docomo (Mobile network operators)	Discount on data communications fees for students aged 25 or lower taking online classes.	Promotional (economic-competition)	Second-generation
Shueisha Inc. and Shogakukan Inc.	Free distribution of the back issues of their manga magazines to entertain students during the school closures	Philanthropic (social)	Second-generation
Sharp Co.	Interactive Study, a personal learning support system, and Super Interactive School, a set of online learning materials from Shingakukai, available for free to elementary and middle schools	Promotional (economic)	Second-generation
Sharp Co.	TeleOffice, a web conference system suited to teleworking environments for free	Promotional (economic)	Second-generation
Sharp Co.	Provided a service in which users can print out their business documents from MFPs installed in thousands of convenience stores across Japan,	Promotional (economic)	Second-generation
Ajinomoto	Donated miso soup and coffee products to healthcare professionals	Philanthropic (social)	Second-generation
Ajinomoto	In Brazil, donated approximately safety equipment. In Peru and Thailand, donated food.	Philanthropic (social)	Second and Third-generation

Kasei	Provided UVC LEDs for disinfection and a visualization solution to prevent infection.	Promotional (Social-health)	Third-generation
Subaru	Produced and donated face masks and face shields	Social-health	First-generation
Honda	With Dynaflo Inc. produced diaphragm compressors, a component of portable ventilators	Social-health	Third-generation
Mitsubishi Motors	Donated JPY1 billion for healthcare workers and vulnerable communities	Social-health	Third-generation
Fujitsu Limited	Committed to the "Open COVID Pledge,"	Social/Economic	Third-generation
Honda	Pledged US$1million for communities across North America, providing the most vulnerable with food.	Social	Third-generation
Shionogi	Commitment to find therapeutic drugs against Covid; vaccines discovery and offering of antibody test kits[2]	Value-creating	Third-generation

Many CSR initiatives in the initial stages of the pandemic had a **philanthropic** orientation like monetary or in-kind donations, in Japan or other countries. Examples of fund donations were by Sony to the Global Relief Fund, and Honda's pledges to communities in North America. These are considered third generation CSR, as it addresses global stakeholders.

Promotional CSR which enhances mutually beneficial relationship exchanges were also seen. Beam Suntory, for instance, donated US$1 million to support the bar and restaurant community. They also provided financial aid and other resources for workers, whose livelihoods were directly impacted as a result of restaurant and bar closures. These are second-generation CSR, as it is limited to within country stakeholders.

There were also **value-creating CSR** that integrated into the firms' mission and core business agenda. These were innovative practices, like sharing knowledge.

2 https://www.shionogi.com/global/en/news/2020/04/20200414.html

Sharing of knowledge

There were also 'innovative' CSR practices. Examples of these include the Open Covid Pledge and the Open Covid Declaration. The Open COVID Pledge is an international alliance of scientists, engineers, legal experts, along with educational institution, corporations, and other organizations committed to make their intellectual property (IP) freely available for use to develop the needed technology, diagnostics, treatments, and vaccines (Steuer, 2020). Organizations can opt to provide "Support" through expression of an institutional support without any legal obligation or make their intellectual property open to the public (Racoky, 2020).

Health Related CSR

To further aid medical professionals in the fight against the coronavirus threat, WeSupport Japan, established by RCF, Oisix Ra Daichi Co., Ltd., and Coconet Co., Ltd. (Seino Holdings Group), in collaboration with 113 companies provided free meals to healthcare professionals around the country (Oisix Ra Daichi Co., Ltd., 2020). WeSupport also promoted initiatives which provided bento boxed lunches and sweets to medical workers battling the coronavirus pandemic (Hamada, 2020).

5. Corporate Social Responsibility in the Philippines

In the Philippines, corporate social responsibility (CSR) is rooted in the spirit of Bayanihan in the form of volunteerism and social donations. Companies are believed to have a social obligation to help the less privileged, local communities, and the nation as a whole. The association with voluntarism can be seen in laws that promote voluntarism, such as the Volunteer Act of 2007 (RA 9418) where it considers "volunteerism in the corporate sector as an expression of corporate social responsibility and citizenship". It refers to activities recognized by the company, where employees contribute time, skills and resources in the service of the company's internal and/or

external communities.

For the founder of the Lopez Group of Companies, CSR entails giving part of the company's earnings to the people. This may be through foundations, grants, scholarships, hospitals or other forms of social welfare. He sees that CSR will result in better business for the company (Asia-Pacific Economic Cooperation, 2005). The former President of the League for Corporate Foundations, Ms. Victoria Gachitorena, defines CSR as an act of doing business which responds to the needs and concerns of its stakeholders (Asia-Pacific Economic Cooperation, 2005). The Philippine Business for Social Progress (PBSP)[3] describes CSR as a business principle which proposes that the long-term sustainability of business must coincide with the development of communities, the protection and sustainability of the environment, and the improvement of the people's quality of life (Bobadilla, 2005).

A survey of business executives in the Philippines found majority of business executives consider CSR as helpful to the bottomline, improves the image of the organization and is important to customers (Maximiano 2004).

CSR during Covid

Although the Philippines is considered one of the most 'disaster' prone and vulnerable countries in the world, the pandemic was a disaster it has much experienced in. The pandemic caught most in the country off-guard. Many corporations had to learn how it could help during the course of addressing the pandemic challenges.

This section documents some of the practices, and organized them according to themes from the articles and news stories gathered during the pandemic. This was complemented by interviews with local government officials and company CSR representatives. They were organized, following the phase of the emergency, following a disaster relief and recovery framework, and sub-organized according to the type of project or help extended by the corporation.

3 PBSP is is a foundation composed of hundreds of corporations.

Emergency-phase

Health Related Health Supply

As early as March 2020, it was apparent that there would be shortage in medical supplies, particularly personal protective equipment (PPE), testing kits, and protective masks given the nature of how fast the virus was spreading throughout the world. Companies donated hundreds of millions of pesos worth of PPEs, test kits and disinfectant alcohol ((Dela Cruz 2020; Madarang 2020, Cabuenas 2020). Some worked through non-government organizations (e.g. Kaya Natin) that also partered with agencies of government. During the pandemic, many did this through the Office of the Vice President. According to Kaya Natin's Harvey Keh[4]:

> *"We worked with the Office of then Vice-President Leny Robredo. We did a fundraising drive to be able to provide PPEs, and food and care kits to frontline, and essential medical workers, particularly the nurses, doctors, who were the frontliners, and the other people working in the hospitals, because at that time, when the Pandemic began way back in March 2020 a big problem was really the supplies for these frontliners like personal protective equipment so they were getting sick…getting Covid …. we were able to raise around 70 million pesos (US 1.2 million) … we were able to provide many hospitals and many frontliners …"*

Testing capacity

When limited testing of patients and people who were exposed to Covid was a problem, some companies (e.g. SMC Infrastructure; Metrobank) Reverse Transcription-Polymerase Chain Reaction (RT-PCR) COVID-19 testing machines and High-Throughput Automated Nucleic Acid Extraction machines that helped increase the government's testing capacity (Cordero, 2020; Arado, 2020).

4 Interview conducted 17 March 2023.

Health Facilities

When Covid cases surged, isolating patients became a concern. Some hotels converted their rooms as quarantine facilities (ABS-CBN 2020). Hotel Sogo donated accommodations equivalent to 800 rooms in its ten branches for health workers in cooperation with hospitals and the local government units (Rivas, 2020). When public transportation was restricted, some provided temporary housing for frontline health workers (Bigtas 2020).

Health Education

Given the limited knowledge about the virus early in the pandemic, some companies provided medical information to the public. Ligo Sardines released public service announcements containing expert's advice on practicing social distancing and self-quarantine (Madarang, 2020) Viber, on the other hand, partnered with the Department of Health (DOH), to launch a chatbot to help users stay updated with news about the virus (GMA News Online, 2020).

Transportation

Some of the problems that resulted from the quarantine was restrictions in movement because public transportation was halted, and many workers, especially frontliners didn't have private modes for moving around. Vice President Leni Robredo organized a free shuttle service for eight routes in partnership with UBE Express, Diamond Motor Corp., Philippines Autogroup, and Seaoil that serviced hospitals in Metro Manila (Antonio, 2020). Google Philippines integrated in the Google Maps app the available routes and schedules of free shuttles plying Metro Manila and nearby provinces placed under community quarantine (Mateo, 2020).

Defend Jobs Philippines launched the "share a spare bike" campaign (The Philippine Star, 2020). One shop, EZ Ride Bike Shop lent 160 bicycles to workers in Davao city (Tejano, 2020). Others, provided in-kind support (e.g. free fuel); discounts/subsidies) to frontliners. Pilipinas Shell Petroleum Corp. offered per liter reduction in gasoline at its 151 retail stations in Luzon and Visayas for all health

workers, police and military personnel, and logistics drivers at the forefront of the COVID-19 efforts. They also provided free fuel to partner hospitals and transport companies to transport frontliners, mobilize ambulances, and other relief efforts. SMC Infrastructure also waived toll fees for medical frontliners at toll roads. Clean-Fuel gave fuel subsidy to participating bus units in the government's free ride for health workers program (Cordero, 2020). Under the Free Motorcycle Ride Project for Medical Frontliners program of the ride-hailing service, 1,000 Angkas riders provided free rides to health workers in selected hospitals in Metro Manila (Gonzales, 2020). Angkas riders were also on standby in these hospitals (Sadongdong, 2020).

Communications

Communication related CSR focused on providing free communications in health care facilities, and providing information related to the disease itself. For example, when the World Trade Center was converted to a isolation and quarantine facility, Globe offered free and unlimited GoWiFiPH connection to help frontliners and patients to remain connected and informed (Manila Bulletin, 2020). Some of these were to help convince infected people go to quarantine facilities. Smart, Inc. also provided internet connection in large isolation sites to help decongest hospitals and reduce community transmission (Colcol, 2020).

Economic

The lockdown in the Philippines impacted the economy and livelihoods. Initially, CSR initiatives focused on short term relief, like providing the basic needs (e.g. food, cash) for people with no access to work. Subsequently, there were projects looking at longer term help.

Relief-phase

San Miguel Foods Inc., at one point were producing 24000 pieces of nutrient-filled bread per day that were distributed to poor communities (Cordero, 2020).

Others, like Ligo also re-channeled their advertising money to NGOs doing relief work (Delacruz 2020). SM Investments Corp. teamed up with social enterprise Maricon Mills, to help small farmers monetize unsold crops (Abadilla, 2020).

By late May 2020, a fundraising initiative among corporations and corporate foundation called Project Kaagapay raised cash donations amounting to P92 million and received in-kind donations worth almost P27 million, reaching 70 hospitals and medical centers in Metro Manila and other provinces and distributing over 200,000 PPE sets for beneficiaries. Individual donations reached almost P4.5 million through joint corporate fundraising (The Philippine Star, 2020). In August, Grab Philippines worked with institutional partners to extend payment holidays on loans of driver-partners, and created donation streams for communities impacted by the suspension of public transportation (Cabuenas, 2020). Utility companies also gave customers six months to settle bills and put off disconnection of services and waived interest and penalties (Rivas, 2020).

Recovery-phase

Online business/Livelihoods

A Filipino financial technology start-up, PayMongo helped MSMEs integrate their respective businesses in the growing digital economy (Romero, 2020). Lazada announced a financial assistance initiative worth P100 million to help its sellers. They also offered the company's own educational resource (Lazada University) to help the small-to-medium business owners grow their online stores (Madarang, 2020). The e-commerce platform Shopee unveiled a seller support package with lower commission and operational costs, a P15,000 subsidy per seller who registered for the package; and provided sellers who registered for sales and marketing support with discounted shop vouchers to boost online visibility and sales. They also waived registration fees and implemented 0% commission fee for marketplace sellers, and educational support via online courses (Cabuenas, 2020).

Platforms and livelihoods

Grab Philippines and the Department of Agriculture (DA) supported agricultural livelihoods by selling their products through the Grab platform (Cordero, 2020). Foodpanda partnered with the Manila city government for the city's 500 tricycle drivers (Rappler, 2020). Dumaguete City local government adopted a "Grab Trike system" for public transportation giving tricycle drivers additional income through the Grab mobile app (Newman, 2020).

Online learning

Schools were also closed in an attempt to contain the virus. These nationwide closures affected hundreds of millions of students, especially the poor who lack the resources to continue their education. In this regard, Landbank offerred a "study now, pay later" scheme where parents can borrow up to PHP 300,000 to pay for their student's tuition fees (Landbank, 2020). The Practical Learning Company, launched Bounce Back Academy, featuring 100% free learning sessions, while also soliciting donations for SME business continuity programs (The Philippine Star, 2020).

PLDT and Smart provided the Department of Education (DepEd) with digital service packages to enable free access to DepEd Commons, an online education delivery platform designed as an alternative mode for teaching-learning (Philippine Inquirer, 2020).

Survey and Interview Results

In a survey of companies (n=20), majority (85%) said they had a unit in their company responsible for CSR. This though is different from what we found in larger companies which tend to also have foundations. One company (Teleperformance), though, reported that this can change, after having undergone a foundational course on ISO 26000:

"It seems that this direction (of having a separate foundation)…. the

foundation has been in existence for 10 years and it seems for me, personally, we kind of are disassociated now with the organization that it is getting more and more difficult to involve the employees in actual CSR work".

While the sample is not random, what is informative is their conceptualization and description of the activities they relate to CSR. Respondents said that the main beneficiary of CSR is the local communities (65%) where their company is located (see **Figure 2**). Second were those who saw employees (15%) as the intended beneficiary. Other groups (like marginalized, customers, board, etc.) only had single responses.

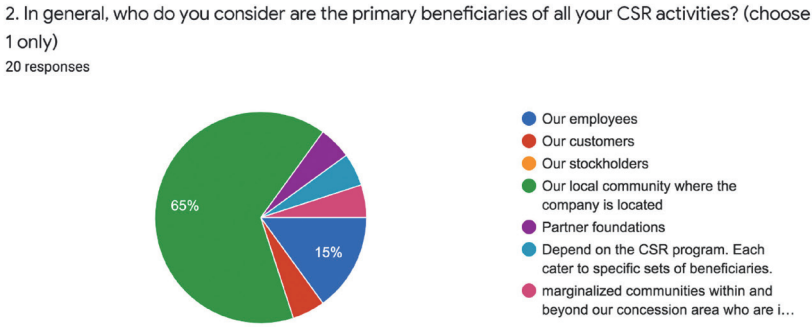


Figure 2 Perceived Beneficiaries of CSR

Everyone reported that their CSR was their company's social obligation to their community (100%). Majority said it was part of their vision, and that it also helped promote sustainable development as well as the reputation/image of the company. Second most mentioned was that it was part of the company's mission/vision, and third was for sustainable development. The idea of sustainable development is beginning to gain traction, and some activities they do are already connected to this. Resppondents described their normal CSR activities to include reforestation, relief operations, scholarship programs, visits to orphanages. One said employee support, likely financial assistance.

Survey results support the notion that CSR is a social obligation to help. During

disasters, many gave examples of donating cash, food, to victims of the disaster, which may include affected employees. In the recent pandemic the examples they gave were donating PPEs, funds for education of students, donating food. This was similar to initiatives that were documented previously mentioned during the pandemic.

Less than half provided some compensation during lockdowns, and only one reported giving full salaries in even during ECQ. Provision of transportation and regular testing of employees (50%) was mentioned by many, although only one considered the working-from-home (WFH) set-up as a CSR for their employees.

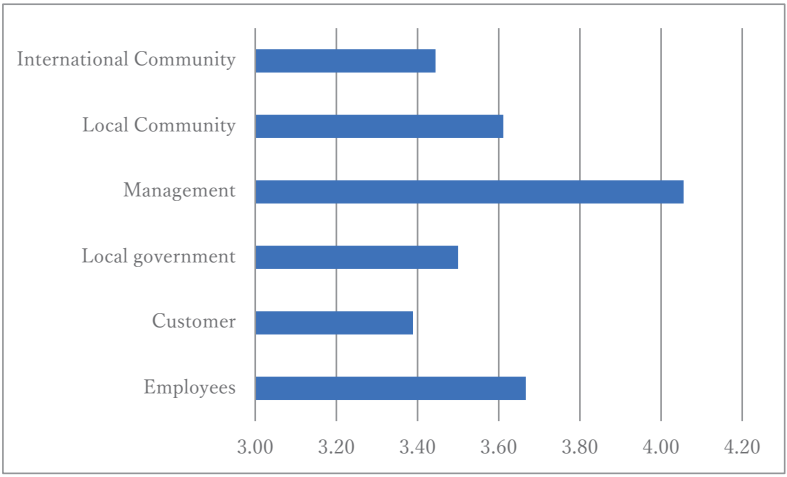


Figure 3 CSR Demanded by Stakeholders

From the respondents' point of view, CSR was more internally driven, by management and employees, rather than those external to it. In this regard, it was s similar to what was found in Japan (see **Figure 3**). This was consistent with the social giving/social obligation/voluntarism view to Filipino conceptualization of CSR. CSR is driven by the company's internal stakeholders and its employees. It is not seen as a 'business motivation' for customers, not something LGUs and the communities are asking of them, but rather, they feel is their responsibility to the community.

Local Government and Corporate CSR

During the pandemic, many CSR initiatives were coordinated though LGUs. According to one City of Mandaluyong official:

"I think all cities were not ready for the pandemic budget-wise and everybody was in a state of panic and most of the NGOs (or) all of the companies ***they have a CSR. And as part of their Malasakit (care for others), they want to go back to the new normal. So they did not only extend an arm but they also extended a leg to the local government unit****. So when the pandemic came, all cities like Mandaluyong were heavily dependent on NGOs."*

The City Administrator from Quezon City had this to say:

"What the government is asking for are CSRs on sustainable programs… let's come up with a memorandum of agreement so that the program is integrated into a real program…"

He gave the example of Companies adopting a partk:

"It is one thing to say let's look for corporations that want to upgrade eight public parks. It's another thing to say, we have an adopt-a-park program, partner with us to build parks. (It becomes part of their branding). So as a result, you have a beautiful park, that the citizens can enjoy and which is highly needed in the pandemic, post-pandemic world. We need open spaces, we need green spaces."

This sentiment of working together was echoed by a company foundation from San Miguel.

"The 'last mile' would often necessitate working with someone you would have never worked with before, right? Whether it was an LGU, or a barangay or a volunteer or, some sort of NGO. And that is the approach that we decided to take in all of our Better World communities."

They then proceeded to discuss their CSR initiatives as a food company on sustainability for reducing food waste, and using them for other communities who can use it even prior to the pandemic. And, during the pandemic, they gave the example of using their logistics system to bring farmers' produce to the market despite all the lockdowns.

6. Conclusion

CSR in Japan has trended towards integrating environmental sustainability with financial materiality and corporate strategy (see Albrecht and Greenwald 2014), whereas in the Philippines CSR still tend to be more social developmentally focused, with CSR associated more with corporate philanthropy. Research and documentation of CSR has also been more developed in Japan as a result. Regular CSR surveys that they do (e.g. Tokyo Foundation annual CSR survey), is something that is yet to be seen in the Philippines, though there have been a few independent studies that have attempted to do this, and to a limited extent was tried in this study.

It is ideal is for CSR to be embedded in ways that make use of products or services generated by the company's business operations or that operate through the company's business processes. In other words, CSR that is integrated with the company's business operations (Kamei 2015). The nature of Japan having larger and more global multi-national operations, may in part have something to do with this. However, there is less focus on social aspects (such as customer relationships, and health and safety) it could be argued that the same is also not yet highlighted in the Philippines, where CSR reporting tends to be more 'developmental' in nature. The larger multi-national corporations in the Philippines, also appear to have more in-

stitutionalized programs. However, those involved in CSR are also beginning to see problems of the disconnect, as well as the benefits of its integration.

Many third-generation CSR activities were documented in Japan. This may be a limitation of online research being limited to English-language news and highlight more international concerns. On the other hand, looking at the types of CSR activities companies did in the Philippines during the pandemic, both from the activities culled from the news, interviews and those from the survey, most were either social or economic. Most examples were second-generation types. Second-generation CSRs focus on community/external stakeholders, and are more likely to be publicized for public relations. They highlight what corporations "give" to the community, by way of connecting and helping them. Companies are like benefactors, unlike how in other countries CSR is what is "expected' in their behavior.

During the pandemic, a large part of CSR activities in the Philippines include food/feeding people; providing PPEs, transportation etc. is also testament to how well the governments in each country is doing, and the kinds of restrictions their governments impose. This is consistent with the literature on the complementarity of voluntary services to fill-in gaps in public goods that government fails to provide, as was also acknowledged by the LGUs. This though is commonly associated with non-profit sector research and public goods theories that explain the sector's development (see Anheier 2005:117-123). This is because in the Philippines, CSR is also a channel for promoting voluntarism.

While Japanese can learn from Philippine CSR practice is its strong link with local community concerns and growing partnerships with LGUs. Philippine CSR however, have not yet reached the level of sophistication that is more strategic and integrated to the nature of its business that is already more common in Japan.

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Comparative Study of Plastics Recycling in Japan and Malaysia: Current State, Challenges and Opportunities

1. Introduction

Plastic waste entering the environment has increased yearly due to inadequate disposal infrastructure and widespread production of plastic products worldwide. The waste negatively affects the ecosystem through altering the distribution of species, harming biological ecosystem and damage through ingestion. Hazardous chemicals released by plastic waste in landfills have the potential to leach into groundwater (Welden, 2020). China is currently the country that contributes the most plastic garbage globally, followed by Southeast Asian nations. Collectively, 8.9 million tonnes of plastic garbage are produced annually by Indonesia, the Philippines, Vietnam, Thailand, and Malaysia. Japan is ranked second in the world in terms of population (Gong & Trajano, 2019). Thermal, chemical, and material recycling are the three categories of recycling processes. Plastic is recycled into new plastic through techniques known as material recycling or mechanical recycling. Chemical recycling, also known as feedstock recycling, is the process of disassembling plastic waste into its component parts, which are then mixed together to create new plastic goods. In order to create energy, plastic is burned in incinerators during thermal recycling or energy recovery. In recent years, Malaysia became the leading alternative destination for plastic scrap after China banned imports of such waste. There was a drastic surge in the shipping of plastic waste to Malaysia from developed countries upon China's announcement of the ban, with the United States contributing approximately 218,000 tonnes in 2018, followed by Japan (119,000 tonnes) and the United Kingdom (112,000 tonnes) for the same year (Wong & Farha, 2019). While a bulk of the plastic waste comes from domestic sources, the increase in the inflows of plastic

waste from other countries, exacerbated by the ban in China, has raised attention on larger issues encircling Malaysia's plastic waste dilemma. Dozens of recycling factories popped up, many operating without license, and residents in the surrounding areas often complained of pollution issues (Chen et al., 2021; Tan, 2019). The objective of this paper is to compare the laws and regulations pertaining to plastic recycling in Malaysia and Japan. Both nations suffered in various ways as a result of China's import restriction on plastic. The comparison will signify two typical development patterns in developed countries and developing countries. The challenges that both nations confront in recycling plastic are listed, along with suggestions for overcoming them. Key points obtained by interviews of the public and private sectors from both countries are also presented and analysed.

2. Methodology

Part I – Literature search and comparative analysis

The approach used in this study starts with defining search criteria using specific keywords (e.g. forest, ecosystem, climate change, plastic recycling in Japan and Malaysia, waste legislation in Japan and Malaysia, etc.). Then the suitable database for the search was chosen. Google Scholar and Science Direct were selected as the databases for collecting data. Research was carried out by reviewing articles on plastic recycling in Malaysia and Japan from 1999 to recent. A review of the literature was carried out by examining published reports, scientific articles, and available statistics and information on plastic waste recycling laws in both countries. A comparative analysis was conducted on the legislations regarding plastic recycling in Japan and Malaysia. The findings are discussed and compared for both countries.

Part II – Interview with policy makers and industry stakeholders

A total of eleven in-depth, semi-structured interviews were carried out with policy makers and industry stakeholders with experience working in Japanese plastic recycling and thirteen in-depth, semi-structured interviews were carried out with

counterparts in the Malaysian plastic recycling industry between July 2021 and July 2022. For Japan, the group of interviewees comprised of:

- 3 representatives from government-designated organisation for recycling co-ordination
- 1 representative from government ministry regulating plastic recycling
- 1 representative from mayorial office of a prefecture
- 3 representatives from plastic-related trade associations
- 3 representatives from private companies related to plastic recycling

For Malaysia, the group of interviewees comprised of:

- 7 representatives from government ministries regulating plastic recycling
- 3 representatives from EPR-driven non-profit organisation
- 1 representative from plastic-related trade association
- 2 representatives from private companies related to plastic recycling

Semi-structured interviews were conducted over structured interviews to allow more freedom for the interviewee to elaborate on related issues while still adhering to a planned structure. Interviews were carried out based on a set of exploratory questions which were formulated before-hand and tested with pilot interviews. One interviewer (SHK) performed all the interviews using online video-conferencing software. The languages used for interviews with Malaysian interviewees were English and Malay while the languages used for interviews with Japanese interviewees were English and Japanese. For Japanese interviewees, a Japanese-English interpreter was contracted for real-time English-Japanese translation.

Questions were formulated to be open-ended and exploratory in nature and broached the subject of challenges faced in plastic recycling in the country, stakeholder expectations from each other, effectiveness of current initiatives on plastic recycling, governmental aid for plastic recycling, awareness levels of the public on plastic recycling and future directions in plastic recycling policies.

Interviewees were selected based on a search to yield stakeholders that commanded significant influence over policy making of plastic recycling as well as industry stakeholders affected by such policies such as government-designated organi-

sation for recycling coordination, government ministries regulating plastic recycling, plastic-related trade associations, private companies and non-profit organisations. In several occasions, a snowballing process was also employed whereby interviewees were asked to recommend other potential interviewees. Interviewees were also advised that all interviews were completely anonymous.

A qualitative analysis was performed to capture meanings attributed by interviewees to issues pertaining to plastic recycling, based on their experiences and opinion. One researcher (SHK) transcribed the interviews real-time during the interviews and the research team (SHK, FSL, SC) performed a qualitative analysis on the thematic content of the interviews after. Results were verified and checked with video recordings of the interviews. Verbal communication was employed to obtain informed consent to record the interviews and to publish the results. The information was anonymised and confidential. No members of the research team nor the interviewees received salary or reward as participation was completely voluntary.

3. Comparative analysis between plastic waste recycling policies and legislations of Japan and Malaysia

It is important to note that up to 57% of recycled plastic waste in Japan is thermally recycled or incinerated, accounting for a sizable portion of the country's plastic recycling rate (Yoshinori & Shiko, 2018). Burning does not qualify as recycling in many countries because of the large amounts of CO_2 produced. Because of this, processing plastic waste in Japan has a significant environmental impact, particularly when it comes to incineration. Polyethylene (PET), polypropylene (PP), and high-density polyethylene (HDPE) waste plastics are usually collected in Malaysia; however, there is a lack of detailed data regarding the types of plastic waste collected in Japan, whereas a wider range of waste plastics are collected there. The type of plastics recycled in Malaysia is largely driven by the price in the informal recycling market. **Table 1** summarises the comparison between plastic recycling policies and legislation in Malaysia and Japan (Kuan, Low & Chieng, 2022).

Table 1 Table summarises the comparison between plastic recycling policies and legislation in Malaysia and Japan.

Aspect	Malaysia	Japan
Waste collection method	No systemised collection programme in the country. Existing methods of recycling services for households are door-to-door itinerant buyers, stationary buyers, micro-enterprises and NGO/CGO, among others.	The recycling process in Japan is coordinated by the Japan Containers and Packaging Recycling Association (JCPRA) in collaboration with specific businesses, consumers, municipalities and recycling companies.
Recycling rates, composition and targets	The rate of plastic recycling in Malaysia is about 11.4% for 2017 (Wong & Farha, 2019). Waste plastics typically collected are PET bottles, PP and HDPE. Detailed information on the overall type of plastic waste recycled is limited. (Moh & Abd Manaf, 2014) In 2020, there is target to recycle 20% of the total wastes generated, 15% for intermediate processing and the remaining 65% to be deposited at various landfill sites (Jereme, Alam, & Siwar, 2015). This target has not been met to date (Bünemann & Brinkmann, 2019).	Japan is leading the way in plastic waste recycling with an impressive 84% rate in 2018 (PWMI, 2019). Approximately 34.3% of plastic waste generated were PE, 22.0% were PP, 11.6% PS, 7.8% PVC and 24.2% others (2018) (PWMI, 2019). Japan targets a reduction of 25% in single-use plastic waste and 60% of plastic containers and packaging recycled or re-used by year 2030; a 100% utilisation rate for all plastic scrap by 2035; and production of 1.81 million tonnes of bioplastics by 2030. Amount of domestic plastic waste generated is expected to increase (Nakatani, Maruyama, & Moriguchi, 2020)
Categorisation and labelling for plastic wastes	Only a few types are recycled in Malaysia namely categories 1 (PET/PETE), 2 (HDPE) and 5 (PP). Under the SIRIM Eco-Labelling Scheme introduced in 2020, products receive independent verification that they were manufactured to specific environmentally-friendly criteria. There are presently 100 product criteria documents (PCDs) under the Eco-Labelling Scheme and 145 companies have received certification ("SIRIM-QAS International," 2020).	Together with identification and material marks specified by the Containers and Packaging Recycling Law, symbols are assigned: 1 to PET, 2 to HDPE, 3 to PVC, 4 to LDPE, 5 to PP, 6 to PS and 7 to OTHER. In 1989, Eco Mark, a was introduced in Japan and spans 47 categories and 4,600 products. In 2002, EcoLeaf was introduced by the government (PWMI, 2019).
Waste management charges	The private licensed concessionaire collects and disposes waste and is paid a flat fee by stakeholders such as households. The the Solid Waste and Public Cleansing Management (SWPCM) does not include the "pay as you throw" (PAYT) system.	There are two types of PAYT systems adopted in Japan: simple unit-pricing programs and two-tiered pricing programs.

Enforcement	No data is available to assess the extent of success of the Malaysian SWPCM Act 2007 so far. Effectiveness of law often hampered by issues in enforcement.	Laws enforced regarding waste plastics and related wastes have been largely successful(Yagai, n.d.).
Practice of 3R	The implementation of the 3Rs is outlined in the SWPCM Act under Part X, where it is a requirement for generators of waste to reduce the amount of solid waste generated. Education campaigns are part of the government's efforts to raise awareness in society under policies such as Waste Minimization Master Plan (WM-MP) 2006 and SWCorp Strategic Plan 2014–2020 (Moh & Abd Manaf, 2017) (Moh & Abd Manaf, 2014).	The government has encouraged the 3Rs under the FLMS. Education campaigns are part of the government's efforts to raise awareness in society where guidance is provided by the community through periodic circulation of various guidelines, books and magazines, for instance the Guidebook for Sorting Recyclables and Waste (distributed door-to-door), newsletters, and "Minacle" the magazine featuring 3R initiatives distributed in newspapers (Kong, Wong, Yang, Chow, & Tse, 2017; Kuo & Perrings, 2010; Usui et al., 2015).
EPR practices in the current legislation	The SWPCM Act introduced the concepts of take-back and deposit refund systems (DRS). These systems apply to the producer, manufacturer and trader, among others and require them to take back targeted materials for the purpose of recycling or disposal. The Act also specifies the role of the waste generator to conduct waste separation and to retrieve valuable components from the waste stream. While EPR and DRS are mentioned in Malaysian law, enforcement of such systems is still lacking to date and restricted to voluntary participation.	The concept of Extended Producer Responsibility is well documented in a series of laws in Japan, most notably The Law for the Promotion of the Sorted Collection and Recycling of Containers and Packaging. Other laws that include EPR are Law for the Recycling of Specified Kinds of Home Appliances, the Law for the Recycling of End-of Life Vehicles, Food Recycling Law, The Construction Material Recycling Law. However, recycling costs persist at high levels such as the cost of recycled PET pellets, demotivating players to enter the industry.
Issues regarding scavengers	The SWPCM Act effectively renders it illegal for scavengers to recycle without permission. The Act prevents the negative impacts associated with the health and safety issues faced by scavengers on landfills and dumpsites.	Waste collectors do not pose as much of an issue in terms of improper and illegal handling of waste compared to Malaysian counterparts. The law also does not specifically target these groups for their illegal or improper practices.
Public perception	Malaysians in general are aware of the concept of recycling but may not able to relate the advantages of recycling and environmental implications of not doing so in a way that affects their quality of life. Indiscriminate waste disposal persists.	The Japanese have largely inculcated the practice of recycling, to the point of making it a family practice, to mark recycle dates on the calendar and actively practicing recycling together as a family. However, cases of indiscriminate waste disposal exists. A recent rise is seen in protests against construction of waste treatment facilities (Zheng, Zhang, Zhang, Wang, & Wang, 2017).

4. Key points in the perception of government and industry stakeholders in Malaysia

Negative perception of plastic recyclers

Non-government interviewees who worked in the plastic recycling industry tend to focus on challenges that prevent the plastic recycling industry from staying afloat. In many of these interviews, mentions were made to the negative perception of plastic recycling companies in Malaysia. Historically, plastic recycling activities in Malaysia were dominated by small and medium enterprises (SMEs). Many of these companies had ties to the triad. One interviewee puts it this way:

> *"Most people in Malaysia, when they speak to a plastic recycler, they're viewing them as someone of low-class. Most of the recycling business here are family-based. Kids grow up in the family doing recycling for the family, they take over from their parents and grow the business. You see sons of owners taking over the business form their parents."*

There seems to be a negative perception of the public on plastic recyclers in Malaysia. Another interviewee mentioned:

> *"All the while raw material for scrap was always a problem. Since back in the 80s, plastic recycling revolved around gangsterism… people use to fight to get scrap… in the 80s and the 90s nobody wants to be recycler. Recyclers were seen as "not educated". Although this industry has been growing for the past few decades, it's not growing like conventional industry due to the stigma involved."*

The negative stigma appears to be deeply intertwined within the social perception of the recyclers in Malaysia. He also associated it with the risk of recycling factories being burnt down as a result of the negative image:

"When people associate plastic recycling to that negative image, they are thinking that recyclers are polluting the air and polluting the rivers… If you keep pushing image like this, there is a risk of recycling factories being burnt down."

A governmental interviewee explains the conundrum in a more detailed fashion, adding that there are companies that were importing plastic waste and dumping a significant portion in the landfills while processing the rest. He mentioned:

"In Malaysia, there are legitimate companies and there are so-called grey companies. The grey companies are tarnishing the legitimate ones. The grey companies, they import feedstock in a not-so-proper way. They are tarnishing the entire industry. Typically, they import plastic waste form overseas, take 20% of the waste that is recycleable and dispose the rest in the landfill illegally. The trade association needs to do more to protect their members (legitimate companies) in this aspect."

Feedstock and labour shortage

One interviewee from the industry mentioned the lack of feedstock for plastic recycling in Malaysia. He added the urgency to import plastic feedstock due to the shortage:

"In Malaysia we don't have enough feedstock for plastic recycling. Nobody can tell you the weight of material collected. If we want to make recycling as industry, we need to allow import of recycled plastic feedstock. Our material not enough to feed enough PET recycling locally."

He continued to stress the issue and how it impacts plastic recycling operations.

"From our conversations with one trade association, one of the key challenges highlighted was on the shortage of labour. Between the plastic industry value chain or production process, we use 5 million tonnes of resin a year. Out of that 3.5 million tonnes we use virgin resins while the balance of 1.5 million tonnes we use recycled material. One of the discussionwe had, was that to produce 1.5 million tonnes of plastic, we need 1.6 million tonnes of recycled plastic. We need 1.1 tonne of recycled resin to make 1 tonne of plastic. Looking at our current waste, only a small portion is usable, so the rest of the feedstock we would have to import."

Government and industry interviewees seem to concur on one point regarding feedstock for plastic recycling in Malaysia. It appears that interviewees from both sectors mentioned the issue of the lack of clean feedstock. One interviewee from the industry mentioned:

"The biggest challenges come from trying to separate and clean waste which comes with other waste. Typically, waste is hard to separate and it's hard to clean. For example, there are layers of packaging around waste plastics, which doesn't command much of a value. There are also single component materials, such as polyethylene. When you have two or three materials, where more than one type of plastic is involved, the value tends to reduce. Pure or single component material commands more value."

A similar point was reiterated by a interviewee from the government sector. He mentioned:

"From the perspective of plastic waste disposal, the key concern is the feedstock. Recyclers are always complaining about lack of homogenous and clean feedstock. Also, when we talk about segregation at source, everything will be dumped into one truck, so contamination is inevitable. This hinders the effec-

tiveness of recycling, unless proper advanced technology is used to treat the waste."

Both government and industry interviewees also stressed the importance of halal feedstock in Malaysia. One industry interviewee puts it this way:

"The rest of the world is cleaning recycled polyethylene (RPET)… In Malaysia, the authorities are thinking of how to make RPET halal. They are thinking of making RPET from resins into food packaging."

The point was re-stressed by an interviewee from the government sector. He mentioned:

"We do not have chemical recycling as an advanced technology. The current environment utilises mechanical recycling. If we were to take advantage of recycling, it is worth to explore chemical recycling. Being a Muslim country, halal is an issue, hence recycling PET can be an issue. Chemical recycling can maybe address the cleansing of the material. There is a need to ensure raw material is being crushed mechanically, the authorities are not convinced that substances from original material is being cleansed. Chemical recycling can totally dismantle the original sources and hence, chemical recycling can overcome the halal issue."

He added on the significance of technology and innovation when it comes to recycling technology. He also mentioned that the government does not support incineration due to the high emissions involved.

"We do not support incineration due to the high CO_2 emissions. With advanced technology, however this can be looked at. There are smart incinerators, but they have fragmented application. Advanced technology with zero emissions

can be accepted. Innovation is a must when it comes to incineration."

Effectiveness of existing laws and initiatives

An interviewee from the industry mentioned that the blame on plastic recycling should not be borne by the industry only. He stressed the importance of the government in this respect. He also explained the latest efforts in curbing issues related to plastic recycling in Malaysia. He iterated:

"Since the China ban, it is not fair to blame the industry for environmental harm, enforcement may be to fault. The current convention restricts import of certain waste for specific purpose. After amendments of Annex II of the plastic convention, in Jan 2021, transportation of plastic is stricter. The ministry has implemented 18 new rulings before importers can import. Any country who wants to export to our recyclers, needs approval from the Department of Environment, only then can the transboundary movement of the waste can be made."

Another interviewee from the government sector also stressed the efforts made since the ban by China in 2018. He added:

"We have some issues with plastics waste import. Since the plastic ban by China, developed countries have been sending waste to Malaysia… because of that we strengthened the guidelines from 9 criteria to 16. Importation is manageable now."

Another interviewee from the government illustrated a joint project with the industry to recycle plastics. He explained his points as follow:

"We are working with a large food and beverage company in Shah Alam. The company will handle the collection mechanism with the local municipality and

will channel the collection to identified recyclers. Recyclers will process and give the material back to the manufacturer. We are looking to replicate small pilot projects like this nationwide. We have to look at recycling capacity of each state. This project touches on circularity of plastics and shows how Circular Economy (CE) work on the ground. CE is there to ensure that waste will be used again as secondary material. With these pilot projects, whatever you segregate at source, this will be the input for recycling. Recyclers are happy to receive homogenous and clean feedstock. This ecosystem needs to be showcased."

One government interviewee explained the limitations of the existing law, attributing them to the number of states involved in adopting the law. He added:

"We face a lot of challenges in terms of implementation of the Solid Waste Management Act or Act 672. Implementation is only limited to 7 states. There are issues of implementing the act other than the 7 states: Pahang, Wilayah Persekutuan, Kedah, Perlis, Melaka, Johor, and Negeri Sembilan. The other states didn't adopt the act. There are issues coordinating. We also lack comprehensive data on waste flow. Existing data on plastic recycling are based on voluntary surveys. Our data is based on feedback from these surveys. We are currently charting a plan on how to collect data on waste flows. There is also the issue of unstandardised waste flow of plastics. We are looking into policies and regulations involved. We hope to fill the gap on the issue of flow of plastic."

5. Key points in the perception of government and industry stakeholders in Japan

Processing capacities and feedstock issues

In Japan, opinions echoed in a similar fashion across the industry and government sectors. One interviewee iterated this point and mentioned a new law for plas-

tics and its effect on processing capacity:

> *"The challenges faced is processing capacity of plastic recycling. Now the Japanese law has been revised, after this municipal office's going to collect not only plastic containers, also other products such as pail etc. after this volume of plastic waste will increase. The capacity will be quite tight."*

One interviewee from the industry mentioned the difficulty in handling the amount of waste from the households and how it would increase with the new law:

> *"We are handling two thirds of plastic wastes from household. Under the new law, it is stipulated that all the plastic waste from household must be handed over to us, if the municipal have specific circumstances, they can recycle on their own. If they dispose of plastic on their own, three things municipal office must do: 1. Municipal office make sure recycling is done properly 2. Municipal office is to make sure plastic waste are recycled and made into commercial products (must include traceability of plastic waste) 3. Disclosure of info to the general public."*

Effectiveness of the existing laws and initiatives

Industry and government interviewees in Japan appear to agree on the effectiveness of the existing laws and initiatives despite limitations pertaining to jurisdictions of the municipal offices and the central government. One industry interviewee mentioned:

> *"The government should come up with standardise measure or rules. They should control the municipal level also. However, under the current system of municipality, collection and disposal are under the responsibility of the municipal level. Central government cannot control this. I think personally central gov should come up with standardised rule to promote recycling."*

Some industry proponents are skeptical on recent initiatives related to plastic recycling. They are anxious as to how it would affect the business of the private sector:

> *"I'm not sure how these initiatives will impact plastic recycling industry. One thing is in this initiative, they aim to reduce plastic wastes. This will be a disadvantage for our company because feedstock will be reduced."*

Advent of new law

One government interviewee was hopeful about the new law that was to be enacted with regards to plastic recycling. She explained:

> *"Under new law, we hope that those plastic resources will go to recycling and recirculating. This law covers not only downstream but only upstream material. She hopes with this new law, the manufacturers, sellers and providers will be required to recycle plastics."*

Another industry interviewee explained the projected impact of the new law and mentioned that there is room for improvement. He also explained that quality and recycling cost will be affected by the new law due to the increase in amounts collected.

> *"The new law is unique because of the collection process: they collect all general waste together (containers and packaging and other plastics) for recycling. This is seen in Europe but not Southeast Asia. In Japan we still have to think how to come up with good system. Quality and cost of recycling will change under collection system."*

One interviewee from the government echoed similar optimism involved with the new law. He explained:

"They are asking consumers to use plastic products as long as possible, avoid excessive use of plastic products to avoid waste, and try to use recycled plastic products as much as possible. There are also things required by manufacturers, government and municipal offices, this is to restrain the use of plastic products as much as possible. People are required to use plastic products for the long term."

6. Barriers faced and resolving strategies for Malaysia and Japan

Apart from the opinions of the interviewees mentioned, based on our literature analysis, other obstacles that still stand in the way of sustainable plastic recycling in Malaysia, include problems with management and logistics, a lack of data on the subject, a lack of focus in the execution of the law, and a lack of laws intended to stop the illegal import of plastic. A number of significant issues with waste management include inadequate legal provisions, resource constraints, irregular collection schedules, a shortage of trained personnel, and inadequate equipment for waste collection (Kuan, Low & Chieng, 2022; Kam, Baharum, & Chua, 2016; Murad & Siwar, 2007; Yusoff et al., 2018). Recommendations made to counter these issues are: the introduction of a central agency for plastic recycling, introduction of indicators and measurements for plastic recycling, introduction of industry-specific legislations and enforcement of targeted stringent laws on illegal plastic waste imports. On the other hand, in Japan, the issues faced pertaining to plastic recycling takes on a different dimension. Barriers currently faced in plastic recycling in Japan include lack of incentive for recycling companies, high environmental load of waste processing, opposition to construction of waste treatment facility and lack of relevant information and data on plastic waste exports. In order to reduce the barriers mentioned, countermeasures are suggested, such as the use of substitute materials, utilizing chemical recycling to the fullest extent possible in addition to mechanical recycling, conducting extensive research on plastic recycling technologies, providing a compensation mechanism for stakeholders, enhancing access to precise data on the recycling and

processing routes of plastic waste, and computing forecast data on plastic waste.

Both Malaysia and Japan face issues such as limitation in landfill capacity and indiscriminate waste disposal by the public. In Malaysia, almost all wastes produced are currently discarded in the municipal landfills. There is an urgent need for improvement in the design of the landfill, site location, and capacity of the disposal sites. Japan also faces a shortage of landfill capacity where currently 1,651 landfills can be found to provide a capacity of 103 million m^3 or 21.8 remaining years for landfill. Exactly 297 municipalities do not possess landfills in their jurisdictions, and approximately 17% of municipalities send domestic waste to private-operated landfills (PWMI, 2019) (Usui et al., 2015). Two strategies could be jointly developed by both countries to mitigate many of the issues faced by both countries: enhancing Extended Producer Responsibility (EPR) and collaboration in establishing joint Ecotowns. Japan is very much ahead of Southeast Asia in terms of implementation of EPR. Capacity development training and the establishment of joint institutions between Japan and the region are much needed and would prove to be beneficial (Putri, Fujimori, & Takaoka, 2018; Thanh, Matsui, & Fujiwara, 2011; Wichai-utcha & Chavalparit, 2019). Regional policy platforms on waste management can be appropriate channels for enhanced implementation of EPR in Asia Pacific. Japan's experiences and capacities can prove valuable to be transferred to Malaysia and neighbouring countries where joint Ecotowns may be set up. EcoTowns in the region is expected to see developments in elaborate data-sharing platforms, intelligent sensors for material balance, algorithms to predict demand and standardisation of recycling product criteria in the foreseeable future.

Similar to Japan Containers and Packaging Recycling Association (JCPRA), Malaysia might do well to create a central agency under government control to manage recycling. The organization could be housed under the Ministry of Environment and Water and would work well with the current stakeholder relationships and plastic flow model. Manufacturers and producers pay recycling fees to the agency, which then posts competitive tenders for recycling businesses to submit bids for. The recycling companies may receive commission fees from the agency in exchange. The

establishment of such a central agency in the Malaysian context continues to face several obstacles. The first of these difficulties would be the alterations made to the existing agreement between private waste concessionaires and local governments. Waste concessionaires are required by the current contracts to gather and dispose of waste. Plastic waste is only partially sorted and sent to recycling factories in a few municipalities (Chen et al., 2021). Renegotiating and drafting new contracts would be necessary to implement the efforts to collect and sort recyclable waste, which would result in increased expenses for local governments—something that many businesses in the area would prefer to avoid. **Figure 1** shows the proposed model for recycling coordination based on the establishment of a central agency in Malaysia (Kuan, Low & Chieng, 2022).

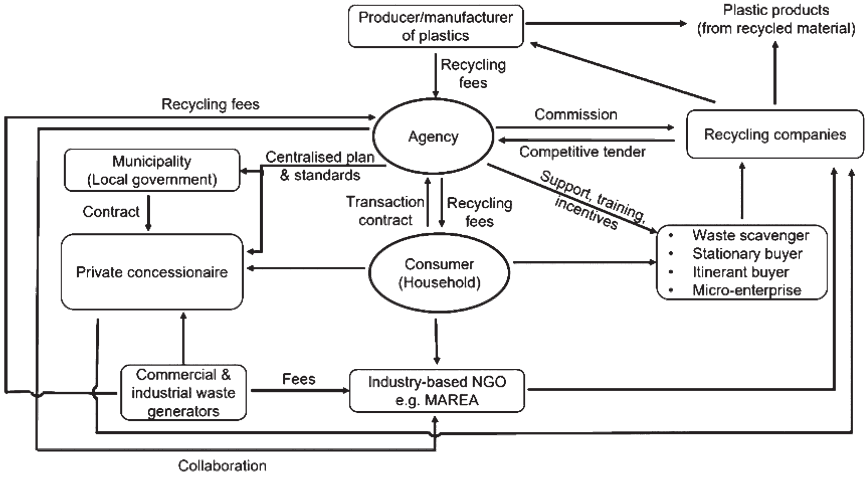

Figure 1 Proposed model for recycling coordination based on the establishment of a central agency in Malaysia (Kuan, Low & Chieng, 2022)

7. Conclusion

Interview results show that in Malaysia, there appears to be a strong negative sentiment against plastic recyclers. The prevailing opinion based on industry interviewees is that plastic recycling is associated with gangsterism and this may affect

the public opinion on plastic recycling as well as related government initiatives. Comparatively, no such opinion exists in Japan. Plastic recycling is mainly carried out by JCPRA and municipal offices. Both countries reported feedstock issues, where Malaysia tends toward lack of feedstock, quality of feedstock and lack of manual labour to sort wastes, Japan borderlines on ability to cope with projected increased tonnages due to the new law enacted in 2022 (The Act on Promotion of Resource Circulation for Plastics (Act No. 60 of 2021). Government interviewees in Malaysia stressed several initiatives to deal with plastic recycling issues while maintaining a realistic view on limitations of existing law pertaining to solid waste, mainly due to the limited number of states involved. In Japan, industry and government opinions related to effectiveness of existing laws remained mixed. While the industry is for plastic waste reduction, those in the plastic recycling industry worry about the lack of feedstock once wastes are significantly reduced. Most of those interviewed remained hopeful and optimistic about the new law on resource circulation for plastics and what it can do for the future of sustainable plastic waste in Japan. Several resolving strategies were outlined for both countries to deal with barriers faced in plastic recycling.

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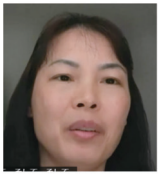
(6) Xuan Thi QUACH (Vietnam Country Director at Pacific Environment, Coordinator of Vietnam Zero Waste Alliance)



Waste Incineration and Solid Waste Management in Japan: Lessons Learned for Vietnam

1. Waste Incineration and Solid Waste Management in Japan

1.1. Solid waste generation and treatment

In the past, both total waste generation and waste per capita of Japan kept increasing till they reached their peaks of 54.834 million tons per year and 1.185 kg/per person per day, respectively, in 2000 [**Figure 1**]. After this milestone, they sharply decreased during 2010s. Since then, we see a gradual and steady downward trend. In 2022, the average waste per capita was only 0.88 kg per day [**Table 1**]. Why did the trends peak in the year 2000? Which factors contributed to these sharp reductions? The answers can be found in the next section.

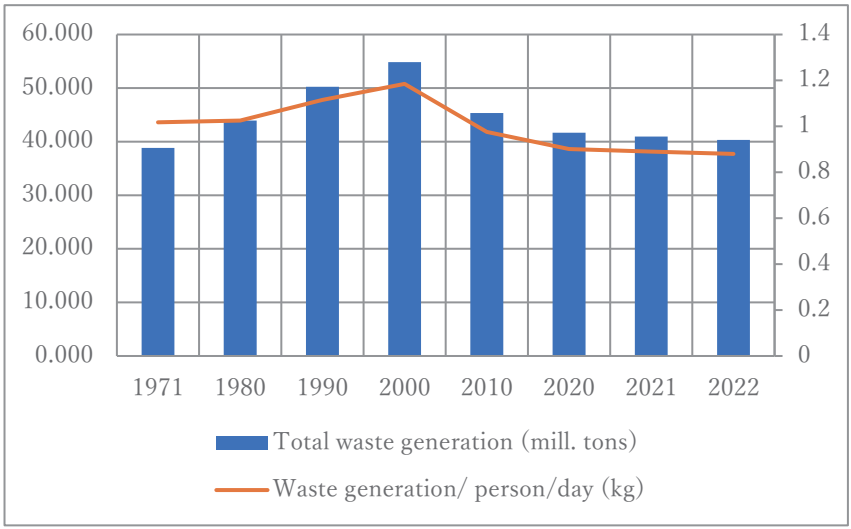


Figure 1 Total waste generation and waste generation per capita in Japan

Table 1 Waste generation and management in Japan

Item \ Year	1971	1980	1990	2000	2010	2020	2021	2022
Total waste generation (103 tons)	38,831	43,936	50,257	54,834	45,359	41,670	40,950	40,340
Waste generation/ person/day (kg)	1.018	1.025	1.115	1.185	0.976	0.901	0.890	0.880
Recycling rate (%)	na	na	7.4	10.0	15.3	20.0	19.9	19.6
No. of incinerators	2,002 (1977)	1,999	1,873	1,715	1,221	1,056	1,028	1,016

Sources[5]*: Annual Report on Environmental Statistics 2016, Japan; Daily waste volume generated per capita Japan FY 2013-2022; Recycling rate of waste Japan FY 2013-2022.*

Solid waste in Japan is generally separated into burnable, non-burnable and recyclable items. At least two kinds of litter boxes can, therefore, be found in most households and public places. The exact definition of what is burnable, non-burnable and recyclable depends on the municipality and the waste treatment plant that is available locally[6]. Some prefectures sort their wastes into 5 types: burnable, non-burnable, recyclable, hazardous, and bulky wastes. About 20% of total waste are recycled, 78% are burned, and the remaining waste is sent to the landfill.

1.2. Solid waste legal framework

The Japanese economy developed rapidly since the 1970s leading to significant waste generation Wastes were typically disposed of in landfills. The people living near landfill areas opposed this method of waste management. The "War against Waste" was declared by The Tokyo Metropolitan Governor in September 1971, stating that the impending waste crisis was threatening the lives of the residents of Tokyo. The Governor stated that the Metropolitan government would implement effective waste management measures, including promoting the construction of waste processing factories and landfills. Things eventually started to move toward resolution because of the implementation of such strategies. The War against Waste

5 https://www.env.go.jp/en/statistics/contents/2016/E2016_Ch4.pdf
https://www.env.go.jp/en/press/press_01276.html
6 https://www.japan-guide.com/e/e2222.html

heightened the awareness that waste is a severe issue for daily life. As a result, people recognized the **importance of government organizations and residents working together to promote waste management**, and strategies were implemented to promote the development of waste management facilities that are friendly to the surrounding environment.

The Waste Management Act was revised in 1976 after 5 years of implementation. The government of Japan promoted the construction of well-performing waste management facilities that meet legal standards across Japan and contributed to improving the capacities of such facilities. During this period, to prevent pollution, increase incineration efficiency, and promote effective waste treatment and disposal, the government of Japan established rules for sorting waste in the process of waste collection (combustible waste, non-combustible waste, and plastics and rubber scrap, for example) in waste management plans formulated by local governments based on the law, thereby promoting the sorted waste collection.

In the 1980s, a rapid increase in the amount of waste led to a shortage of landfills. It became difficult to prevent combustible waste from being landfilled without being incinerated. In Japan, the incineration of wastes before they were landfilled became the typical treatment method to ensure both hygienic management and a reduction in volume. Many plans to construct waste incineration plants near residential areas were announced, and protests against the construction of waste incineration plants intensified in various parts of Japan. There was an increasing concern among residents that the incineration of waste containing plastic, particularly vinyl chloride, would produce dioxins, and the flue gases from plants would harm the health of nearby residents. This transformed into a problem recognized by society when consumer organizations launched a boycott of vinyl chloride products. Japanese society already had a deep distrust of waste treatment because of illegal dumping incidents from the 1980s and dioxin problems.

With the continuous increase of solid wastes, to provide comprehensive solutions to such problems, the Japanese government **shifted the focus of its policies to reducing waste generation itself**. In the 1991 revision of the Waste Management

Act, waste generation reduction was added as a purpose of the act, along with sorted collection and recycling of waste. In addition, the Basic Recycling Act in 2000 provides a clear vision for a sound material-cycle society, which is designed to reduce natural resource consumption as well as environmental impact; it also presents basic principles for the establishment of a sound material-cycle society, including legally determining the order of priority for resource recycling and waste management (1) generation reduction; 2) reuse; 3) recycling; 4) thermal recovery; and 5) proper disposal).

Bold measures were introduced to respond to the situation in 1997 and 2000, including increasing the responsibility of business operators who generate waste, strengthening the waste manifest system, introducing penalties of up to 100 million yen (approximately US$1 million) for illegal dumping, and strengthening measures to control dioxins at incineration plants. There were many other acts, especially the Food Recycling Act (2000) and Revision of the Waste Management Act (2000) which promotion of 3R measures aimed at the establishment of a sound material-cycle society, enhancement of industrial waste management, and enhancement of illegal dumping regulations. The 3R Promotion National Convention is held annually by the Ministry of the Environment in collaboration with the 3R Promotion Forum and local governments to provide an opportunity for consumers, business operators,

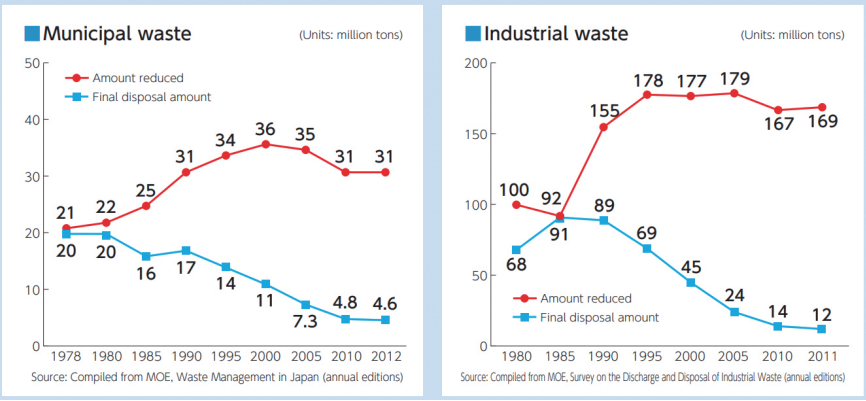


Figure 2 Effectiveness of waste reduction with waste management policies in Japan

and government staff to gather together to compare notes regarding the establishment of a sound material-cycle society and for individual participants to review their lifestyles.

As a result, of particular note, (i) the amount of final disposal waste reduced [**Figure 2**] from 20 million tons in 1980 to 4.6 million tons in 2012 for municipal waste and from 91 million tons in 1985 to 12 million tons in 2011 of industrial waste [MOE]; (ii) the emissions of dioxins and dioxin-like compounds (DLCs) in Japan were successfully reduced from 5,000 grams in 1997 to 64 grams in 2004, a 98 per cent reduction [UNEP].

Learning the legal framework history of Japan on solid waste management, it is easy to understand the above peaks of waste generation and waste per capita were results of at least four policies in 2000, including Basic Act for Establishing a Sound Material-Cycle Society; Construction Recycling Act; Food Recycling Act; and the 5th Waste Management Act. These results also show the effectiveness of Japan in law enforcement.

1.3. Waste incineration in Japan

From 1960s, Japan began disposing urban garbage by incineration, and today, Japan has the world's leading garbage incineration facilities. Regarding quantity, in the fiscal year 2009, there were 1243 incineration facilities in Japan [**Table 1**]. As population decreased, waste generation nationwide fell from 44.87 million tons in 2013 to 40.34 in 2022, and waste incineration facilities also dropped from 1318 in 2005 to 1221 in 2010, 1,172 in 2013, and 1,016 in 2022, of which number of waste-to-energy is 404 with the total annual power generation of 13.331 GWh [Ministry of the Environment] [7].

In terms of technology, several methods have been used in incinerating garbage - stoker furnaces, fluidized bed furnaces, and gasification fusion resource furnaces

7 https://featured.japan-forward.com/japan2earth/2024/05/6970/

with the goal of ash recycling. Stoker furnaces account for 70% (about 870) of all furnaces, and improvement of this type of furnace is progressing rapidly. Today, while high-level environmental conservation technologies are being introduced, technologies related to high-efficiency power generation and technologies related to safe operation, such as automatic incineration devices and automatic cranes, are also being developed. Japan is now accumulating know-how on handling diverse types of commonly seen garbage these data, ranging from the low-calorie garbage, which was generated when incineration facilities were first being built, to the high-calorie garbage of modern times. Such technologies can be used for the type of garbage generated in the Asian region. The newest stoker furnace technology is low-air incineration that aims for high-efficiency power generation, which is already under construction in Japan [Ministry of the Environment][8].

There is one problem associated with emissions from incineration. It is known that incineration plants for municipal waste generate SOx, HC1, NOx, smoke and dioxin. From the perspective of environmental preservation and to obtain approval from people living near the plant, harmful substances in the exhaust gas must be sufficiently reduced. In response to this need, many studies have been conducted by Japanese public and private institutes, where many countermeasure technologies were developed, and improvements have been made on operation technology. Studies have shown that dioxin is produced by incomplete combustion of waste, and measures have been taken to prevent and reduce dioxin generation with complete combustion in the furnace. So, problems related to dioxin from incineration have been nearly resolved. Sufficient environmental measures are also taken for SOx, HC1, NOx and other substances in Japan.

With approximately 73% of the Japanese archipelago occupied by mountains, and much of the rest crowded with people, there is little room for landfill, so what cannot be recycled is mostly burned. And recycling is surprisingly rare: Japan has **one of the lowest recycling rates** among OECD countries, at only 20% in 2017.

8 https://www.env.go.jp/content/900453393.pdf

Some 78% of the remaining waste is sent to incinerators—by far the highest among the OECD block[9]. This points to the fact that waste incineration discourages waste recycling.

2. Waste Incineration and Solid Waste Management in Vietnam

2.1. Solid waste generation

The statistics [MoNRE, 2019] show that from 2011 to 2018, the volume of domestic solid waste was produced at an average growth rate of about 12% per year. In 2015 [**Table 2**], the volume of waste generated about 42,789 tons per day; in 2018 it increased to about 61,600 tons per day (of which, about 37,200 tons per day in the urban area and about 24,400 tons per day in rural areas).

Table 2 Waste generation and management in Vietnam

	2011	2015	2018	2019	2020	2023
Total domestic waste generation (mill. tons)	16.21	15.62	22.48	23.60	15.05	24.50
Domestic waste generation(kg/person/day)	0.5	0.5	0.6	0.7	0.4	0.7
Total population (thousand)	88145.8	92228.6	95385.2	96484.0	97582.7	100309.2
No. of waste-to-energy incinerators			1	1	1	2 (+ 5 others are piloting)

According to the Department of Environmental Pollution Control, the total amount of solid waste generated nationwide in 2019 is 64,658 tons/day (23.6 million tons/year) and in 2023 is about 67,110 tons/day (about 24.5 million tons/year), of which in urban areas it is about 36,875 tons/day. The total amount of solid waste in Hanoi and Ho Chi Minh City alone accounts for about 23% of the total amount of waste nationwide, and about 46% of waste in urban areas of the country[10]. The figures of 2020 were lowest [**Figure 3**]. This was because of Covid 19. Lots of wastes

9 https://tokyoreview.net/2019/07/burning-problem-japan-waste-recycling/

10 https://congnghiepmoitruong.vn/ca-nuoc-hien-co-khoang-15-du-an-dot-rac-phat-dien-dang-duoc-trien-khai-xay-dung-12260.html

were burnt in the back yards.

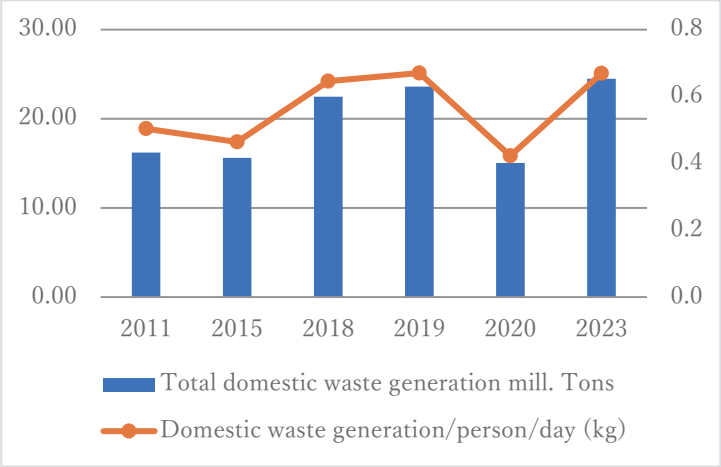


Figure 3 Domestic waste generation and waste per capita in Vietnam.

According to the Department of Environmental Pollution Control, by the end of 2023, the country had about 1,712 solid waste treatment facilities, including 467 solid waste incinerators, 38 compost production lines, and about 1,207 solid waste landfills, many of which were unsanitary. Some treatment complexes or treatment facilities have applied the method of combined incineration and energy recovery for power generation or incineration combined with landfill and composting[11].

2.2. The legal framework of solid waste management

Before November 17th, 2020

MSW segregation at sources was not stated in the Law on Environmental Protection in 2014 [Article 85, Law no. 55/2014/QH13], and the Government shall make a Decree on MSW management. However, Decree No.38/2015/NĐ-CP stated that Provincial Government Provincial People's Committees should guide and organize the implementation of MSW segregation suitable to its specific natural, so-

11 https://quanly.moitruongvadothi.vn/15/27092/Viet-Nam-hien-co-bao-nhieu-nha-may-dot-rac-phat-dien.aspx

Table 3 Law on solid waste management in Japan and Vietnam

No.	Event of Japan	Date	Event of Vietnam	Date
1	Lack of landfill	1980s	Overcapacity of all landfills	2010s
2	Public Cleansing Act	1954	-	na
3	1st Waste management act	1971	1st Law on Environmental Protection (LEP)	1993
4	2nd Waste management act	1976	2nd LEP	2005
5	3rd Waste Management Act	1991	3rd LEP	2014
6	Containers and Packaging Recycling Act	1995		
7	4th Waste Management Act	1997	4th LEP Started to regulation on sorting separately the organic waste	2020
8	Act on Special Measures against Dioxins	1999	Vietnam signed the Stockholm Convention regulating POP substances on May 23, 2001 and **ratified** this Convention on July 22, 2001, officially becoming the 14th member of the Convention. These are **internalized** in Articles 69, 97, 98 of the Law on Environmental Protection 2020	2001 2020
9	Basic Act for Establishing a Sound Material-Cycle Society	2000	Recycling regulation in EPR	2020
10	Construction Recycling Act	2000	Decree 38/2015/ND-CP on waste and scrap management. Circular no. 08/2017/TT-BXD regulating about construction waste management issued by Ministry of Construction dated on May 16, 2017 under Decree 38/2015/ND-CP.	2015 2017
11	Food Recycling Act	2000	In LEP 2020 (Article 75) Takes effect in 2025	2020 2025
12	5th Waste Management Act	2000	Na	
13	Automobile Recycling Act	2002	EPR regulations in LEP 2020 and Decree 08/2022/ND-CP, takes effect in 2027	2027
14	6-7-8th Waste Management Act	2003 2006 2010	Na	
15	Small Home Appliance Recycling Act	2013	EPR regulations in LEP 2020 and Decree 08/2022/ND-CP, takes effect in 2025	2025

cio-economic conditions.

As a result, waste segregations at source and the 3Rs programs were stopped after piloting at some small scales. The work was only done during the piloting phases

of projects with technical and financial support from some international donors.

After November 17th, 2020

The Law on Environmental Protection 2020 of Vietnam was issued on November 17, 2020. There are many new regulations on solid waste management [**Table 3**].

A. Regulations on Extended Producer Responsibility (EPR)

EPR of Vietnam divides responsibility of producers and importers into two different ones of recycling and treating concerning recyclable and non-recyclable packages/products.

According to Article 54 of Law on Environmental Protection 2020 (LEP2020), producers and importers of recyclable products and packages must recycle them according to the mandatory recycling rate and specifications, except for products and packages exported/temporarily imported or produced/imported for research, learning, or testing purposes. They can opt to organize recycling of products and packages or make a financial contribution to the Vietnam Environment Protection Fund to support the recycling of products and packages. The mandatory recycling rate roadmap and the financial contribution for recycling will be defined by the government.

Responsibility of producers and importers for waste collection and treatment is stated in Article 55 of LEP2020. Accordingly, the producers and importers of products and packages, which contain toxic substances, are difficult to recycle or cause difficulty in the collection and treatment must make a financial contribution to support the activities of (i) Collecting, transporting, and treating domestic solid waste generated from households and individuals; (ii) Researching and developing technologies, techniques, and initiatives for domestic solid waste treatment; (iii) Collecting, transporting, and handling packages containing agrochemicals; except for products exported/temporarily imported or produced/imported for research, learning or testing purposes. The financial contributions shall be determined by the government and according to the quantity or unit of products/packages.

B. Import of scraps

Regarding environmental protection during the import of scraps, Article 71 of LEP2020 states that scraps imported into Vietnam are only permitted as production materials for their manufacturing establishments, and importing entities must have a written commitment to re-export or treat scraps if they are imported without satisfying environmental protection requirements.

C. Reduction, reuse, recycling and treatment of plastic waste, prevention and control of ocean plastic waste pollution

Due to the serious problem of ocean plastic trash, the LEP2020 provides regulations to prevent this. Hence, entities shall reduce, classify and dispose of waste that is single-use plastic products and non-biodegradable plastic packaging according to regulations; not discharge plastic waste directly into the systems for drainage of water to rivers, ponds, lakes, channels, and oceans; The government will encourage the reuse and recycling of plastic waste in service of production of goods and building materials and construction of traffic works; encourage the research and development of systems for collecting and treating plastic waste floating at sea and in the ocean; introduce policies to promote reuse and recycling of plastic waste. Provincial People's Committees will organize the collection and treatment of plastic waste within their provinces; encourage the reduction of non-biodegradable plastic packaging and single-use plastic products; disseminate information about harmful effects of dumping of fishing gear into the sea and plastic waste on the ecosystem. The Government will prescribe a roadmap for reducing production and import of single-use plastic products, non-biodegradable plastic packaging and products and goods containing micro-plastics.

D. Waste sorting at source

Regulation of waste sorting at source was in the LEP since 2005. However, its implementation failed due to the lack of enforcement, synchronized infrastructures, behavior-changing communication, etc. Realizing the fact that waste sorting at

source is always important regardless of waste treatment technologies, it was again stated in Article 75 of LEP2020 and be in active from January 1st of 2025. From this moment, domestic waste generated by households and individuals is classified as: (i) Reusable and recyclable solid waste; (ii) Food waste; and (iii) other domestic solid waste. Accordingly, reusable and recyclable solid waste will be transferred to entities for reuse and recycling or facilities licensed for collection and transport of domestic solid waste; food waste and other domestic solid waste must be contained in packages as prescribed and transferred to facilities licensed for collection and transport of domestic solid waste, of which food waste may be used as organic fertilizers and animal feeds.

E. The volume-based fee

Based on the principle of "polluters pay for pollution", the LEP2020 introduces a new financial mechanism of waste volume-based fee, i.e., the charges for domestic solid waste collection, transport, and treatment services payable by households and individuals will be calculated in accordance with regulations of law on prices and vary by quantity or volume of the classified waste; Any household or individual that fails to classify or correctly classify domestic solid waste as prescribed in the Law must pay charges for collection, transport, and treatment services as other types of domestic solid waste. However, one weak point of this regulation is that it does not encourage waste generators reducing several types of wastes, because it is stated that "if solid waste is reusable and recyclable and hazardous waste is classified, households and individuals are not required to pay charges for collection, transport, and treatment services".

F. Regulation about circular economy

According to Article 142, circular economy is an economic model, which encompasses the design, production, consumption, and services activities aimed at reducing raw materials, extending product life, reducing waste generation, and minimizing adverse impacts on the environment. The provision assigns tasks for different

stakeholders: ministries, ministerial agencies, and provincial People's Committees incorporate circular economy immediately at the stage of formulating a development strategy, planning, plan, program, or project; managing, reusing and recycling waste; Every business establishes a management system and take measures to reduce extraction of natural resources, reduce waste and increase waste recycling and reuse from setting up a project and designing a product or goods to production and distribution; and the Government elaborates on criteria, roadmap, and mechanisms for encouraging the implementation of circular economy in conformity with the national socio-economic conditions".

G. Decree 08/2022/ND-CP

Guidelines and details of LEP2020 are in Decree 08/2022/ND-CP. In accordance with Article 73 in the LEP2020, Article 64 of Decree 08/2022/ND-CP specifies a road map to limit single-use plastics, accordingly:

1. From January 1, 2026, it is prohibited to manufacture and import non-biodegradable plastic bags with dimensions smaller than 50 cm x 50 cm and a film thickness of less than 50 μm, except for the production for export or manufacture or import for packaging products and goods for sale on the market.
2. Gradually reduce the production and import of single-use plastic products, non-biodegradable plastic packaging and products and goods containing microplastics. After December 31, 2030, stop production and import of single-use plastic products, non-biodegradable plastic packaging, and products and goods containing microplastics.
3. Provincial People's Committees will issue regulations and oversee the implementation of plastic waste management activities. They will ensure that starting from 2025, single-use plastic products and non-biodegradable plastic packaging will not be allowed to be circulated or used in commercial centers, supermarkets, hotels, and tourist areas. There might be exceptions for products and goods with non-biodegradable plastic packaging.

Detailed provisions of EPR are found in Chapter VI of the Decree. Notably,

packages of foods (including direct (inner) packaging and outer packaging) are considered as recyclables, while in fact, all the single and multi-layer packages, such as instant noodle packages, are hard to recycle or better to say unrecyclable. In addition, chemical recycling, such as plastic to fuel, is accepted as a recycling method; co-processing is considered as waste reuse (Article 3); energy recovery through waste incineration is encouraged in circular economy (Article 138).

Some other relevant national standards (QCVN/TCVN) on solid waste management include:

- ✓ QCVN 30:2012/BTNMT National technical regulation on industrial waste incinerator emissions
- ✓ National technical regulation on domestic waste incinerator QCVN 61-MT:2016/BTNMT
- ✓ QCVN 41:2011/BTNMT National technical regulation on co-treatment of hazardous wastes in cement kilns
- ✓ QCVN 55:2013/BTNMT - National technical regulation on infectious medical waste autoclaves
- ✓ QCVN 56:2013/BTNMT - National technical regulation on recycling waste oil.

Policies and strategies for national solid waste management

- ✓ Decision No. 166/QD-TTg dated January 21, 2014, of the Prime Minister promulgating the Implementation Plan of the National Strategy for Environmental Protection to 2020, with a vision to 2030;
- ✓ Decision No. 491/QD-TTg dated May 7, 2018, of the Prime Minister approving the adjustment of the national strategy on integrated solid waste management to 2025, with a vision to 2050.

This national strategy sets an objective of maximum waste diversion to the landfill at 30% for urban areas and at 20% for the rural areas, and this figure with any new waste treatment technology must be equal or below 20%.

With all the above regulations, standards, and national strategy, regarding quantity, it can be said that the legal framework on waste management of Vietnam has

been quite adequate; however, from the quality point of view, there are some good and bad points. The good things are the regulations on compulsory waste sorting, volume-based fee, extended producer responsibility, limitation on single-use plastic production and consumption, circular economy, etc. The bad things are: the law accepts plastic chemical recycling under extended producer responsibility regulations; considers food packages of single or multi-layers as recyclables; waste-to-energy incineration and/or plastic-to-fuel is accepted as a recycling method in Decree 08, while it is discouraged in the national waste management strategy. In addition, all the advanced regulations are very new, and it will take some more years for these regulations to be implemented effectively.

2.3. The current solid waste collecting and treating system.

Common forms of MSW collection and transportation in Vietnam include:

- ✓ Collection at public locations: This form uses storage locations. They serve as a place to collect and receive municipal solid waste (MSW).
- ✓ Collecting in residential clusters: Collecting vehicles stop at specified locations and people pour MSW into vehicles. Full collection vehicles will be transferred to a transfer station or treatment facility.
- ✓ Home collection: waste collectors go to each household, bring the household's waste container to the collection truck, empty and return the container to its original place. This is the form without the participation of residents. Types of collection at home are being used popularly in Ho Chi Minh City and other provinces.
- ✓ Collecting on the sidewalk: residents are responsible for placing containers in the right place and taking the empty container once the waste has been collected.

One of the pressing problems of the city nowadays in business MSW collection is the lack of waste gathering places and transfer stations.

The socialization of MSW collection and transportation is being carried out widely in many places. However, cities with urban environmental companies

(URENCO) oversee collecting, transporting, and treating most municipal solid waste.

According to the statistic [MoNRE, 2019], the main treatment method of solid waste in Vietnam was landfilling. Specifically, 71% of the solid waste were dumped in the landfills, 16% were composted, and 13% were incinerated.

2.4. Incinerators and waste management in Hanoi

According to data from the Hanoi Department of Construction, the average total volume of daily-life solid waste in the city is about 7,000 tons/day. In which, food waste accounted for 51.9%; inert substances (rubber, leather, wood...) accounted for 38% and the amount of recyclable solid waste accounted for less than 7.1%... The main treatment was still by hygienic burial method (accounting for 98% of total solid waste collected); In addition, it is treated by combustion without generating electricity (accounting for about 2%).

According to the master plan on solid waste treatment of Hanoi capital to 2030, with a vision to 2050 (approved by the Prime Minister in Decision No. 609/QD-TTg dated April 25, 2014), Hanoi has 17 solid waste treatment areas, however, so far only 2 treatment zones (Soc Son Waste Treatment Complex - Soc Son District and Xuan Son Solid Waste Treatment Area - Son Tay Town) operate but both of the above treatment sites are no longer be able to bury in the next 1-2 years.

“There have been two projects of high-tech waste treatment plants approved by the city for investment. The waste Incineration Plant with a capacity of 4,000 tons/day at the Soc Son Waste Treatment Complex has been operated since November 2023. Waste Incineration Plant with a capacity of 1,500 tons/day at Xuan Son Solid Waste Treatment Area, expected to operate from October 2024.

2.5. Incinerators and waste management Quang Binh Province

According to statistics from the Quang Binh Department of Natural Resources and Environment, the total amount of domestic waste generated in the province is about 481.72 tons/day - mainly concentrated in the cities. There are about 100.40

tons/day in Dong Hoi City, 90.36 tons/day in Bo Trach District, and about 64.13 tons/day in Ba Don Town. Currently, the implementation of the collection, transportation, and treatment of domestic waste in Dong Hoi City is handled by Quang Binh Urban Development and Environment Joint Stock Company. Ba Don Town and 7 districts are managed by the District Public Works Management Board.

At present, the rate of waste collection in the province is 79.52%, of which urban areas reach about 90.46% and rural areas reach about 73.69%[12].

The factory project of sorting, treating waste, producing biogas and organic mineral fertilizer, invested by Vietnam Project Development Co., Ltd. has a scale of 9ha. This is the first modern factory invested in Quang Binh with a total investment of more than 53,835 thousand Euros, equivalent to about 1,380 trillion VND, with a designed capacity of 245 tons of domestic solid waste and 60 tons of agricultural waste per day. However, since 2017, the plant has not yet been functioning[13].

2.6. Incinerators and waste management in Da Nang

From 2019, domestic solid waste (MSW) of the city was an average of 1,177 tons/day, about 1.03 kg/person/day. The amount for 2020 decreased by about 8% compared to 2019 due to the impact of the Covid-19 epidemic, which was 1,087 tons/day. According to forecasts under normal development conditions, by 2030, the city will generate 1,794 tons of solid waste/day and by 2045 about 2,450 tons/day. In the past 5 years, solid waste collection, transportation, and treatment have reached 95%. All this waste was sent to the Khanh Son Landfill.

Regarding the waste composition, through the combined research results, the proportion of plastic waste in the city's MSW accounts for about 12.7%, about 90-140 tons/day. In which, the rate of classification and collection of plastic waste at source and informal collection is at 95%, the volume of plastic waste is not

12 https://www.moitruongvadothi.vn/quang-binh-quan-ly-xay-dung-su-dung-nghia-trang-va-trien-khai-phan-loai-rac-thai-tai-nguon-a138887.html

13 https://baoxaydung.com.vn/quang-binh-xu-ly-rac-thai-do-thi-bang-cong-nghe-lo-thieu-bai-toan-con-dang-do-336932.html

controlled at 6 tons/day. The waste plastic compositions according to types are as follows: (1) about 5.48 tons of plastic bags (91.25%), (2) 0.03 tons of PET plastic (0.55%), (3) 0.29 tons of PVC plastic (4.89%) and 0.2 tons of multi-component resin - (3.31%). It is forecasted that by 2030, the total volume of plastic waste (PET, PVC, nylon, multi-component plastic) will be 228 tons/day out of the total generated waste volume of 1,794 tons/day.

As planned, a municipal solid waste treatment plant of 1,000 tons/day at the solid waste treatment complex of Da Nang city (Hoa Khanh Nam Ward, Lien Chieu district) has a total estimated investment capital of VND 823.5 billion for a maximum period of 25 years from the date the investor signs a contract with a competent state agency. In which, the project implementation period should not exceed 2 years. The project is implemented in the form of PPP-BLT (Build - Lease - Transfer). Thus, within 23 years, the city must spend at least VND 823.5 billion to pay investors through hiring investors to treat the city wastes, which means that the city has to pay at least VND 35,8 billion per year - approximately VND 100 million per day, equivalent to a waste treatment cost of VND 100,000 per ton (the current landfilling cost is VND 64,255 per ton).

There is another planned upgrading of the incinerator in Da Nang. Vietnam Urban Environment Joint Stock Company (MTDTVN) and its partner Everbright International (China) are continuing to complete the preparations to build a waste incineration plant to generate electricity at Khanh Son landfill with investment capital of USD 80 million (VND 1760 billion VND), waste treatment capacity of 650 tons/day). In 2009, Da Nang granted investment policy to MTDTVN Company to build a waste treatment plant with a capacity of 650 tons/day on an area of 9.5 ha, lease land tax-free for 45 years. In 2015, the factory operated but after 6 months it had to stop because the technology was too poor, and the efficiency was low. Now, MTDTVN continues to implement the project[14].

14 https://vietnamnet.vn/vn/kinh-doanh/dau-tu/cong-ty-cua-trung-quoc-tham-gia-du-an-nha-may-rac-lon-nhat-da-nang-552949.html

2.7. Incinerators and waste management in Can Tho

According to the Department of Natural Resources and Environment (NRE) of Can Tho City, at present, about 700 tons of domestic waste is collected every day in Can Tho city, the collection rate reaches 98.78%[15]. People bury or burn the rest in their backyard. Can Tho city currently have 4 domestic solid waste treatment zones in Co Do district, O Mon district, and Thot Not district, and one Can Tho waste to energy Plant[16].

The Can Tho WTE Plant was completed and put into operation on October 15, 2018, with an area of 5.3 hectares; the average amount of waste received per day is more than 453 tons (accounting for about 70% of the amount of waste generated in the city). However, according to a representative of Ever Bright Can Tho Environmental Energy Company - the unit that manages and operates the Can Tho WTE Plant, since its operation until now, on average, about 350 tons of waste has been put into the incinerator per day[17].

Up to now, the factory has completed 5 environmental protection works, including wastewater collection and treatment works; dust and exhaust treatment works; normal solid waste storage and treatment works; hazardous waste storage facilities and equipment, and other environmental protection works and measures. In particular, for the treatment of leachate, the plant has built a treatment system with a capacity of 200m3/day and night. The leachate, after being treated up to the standards is reused for the operation of the plant, not discharged into the environment. The ash remaining after the incineration process is preliminarily processed and treated at the storage area of the plant and will be transferred to the functional unit for treatment or used as raw materials for the production of building materials and leveling (for ash and slag meeting the prescribed standards).

Waste management practices in four cities/provinces and in Vietnam show

15 https://baocantho.com.vn/-e-nghi-thuc-hien-tot-cong-tac-thu-gom-van-chuyen-xu-ly-rac-a176069.html
16 https://baocantho.com.vn/can-tho-no-luc-nang-cao-hieu-qua-bao-ve-moi-truong-a127390.html
17 https://bnews.vn/nha-may-dot-rac-phat-dien-can-tho-hoa-dien-luoi-quoc-gia-hon-113-trieu-kwh/188216.html

that, in general, solid wastes have not been sorted at the source, waste fees are at a flat basis that does not encourage waste reduction. Waste collection rates are rather high but most of the collected wastes are sent to the landfill or to the waste to energy plants with mixed wastes as inputs. Various incineration technologies have been adopted in Vietnam from Belgium, Germany, China, etc.

Regarding legal framework, Vietnam has most of advanced regulations such as waste sorting at sources, volume-based fee mechanism, extended producer responsibility, circular economy, or scrap import limitations, and etc. However, these regulations have just started or will be implemented from 2025, and enforcement effectiveness is still questionable.

3. Comparison of Solid Waste Management in Japan and Vietnam

From the above information on existing conditions on waste management in Japan and Vietnam, it can be seen that Vietnam's solid waste management system is about decades behind that of Japan. For example, the first Public Cleansing Act of Japan is in 1954 but the first Law on Environmental Protection of Vietnam is in 1993 (40 years behind), lack of landfills in Japan happened in the 1980s but it was around the 2010s for the case of Vietnam (30 years behind). However, this gap has been gradually narrowed down. Organic or food waste was addressed in Japan in 2000 and Vietnam started addressing this in 2020 in the 4th revision of the Law on Environmental protection (20 years behind).

Municipal wastes have not been sorted at sources in Vietnam while it has been done in Japan since 2000. In some places of Japan, wastes are sorted into 45 types, but 2 types (recyclable and the rest) or 3 types (recyclables, hazardous waste, and the rest) in Vietnam with some pilot projects before 2025. From this time, domestic wastes are classified into 4 types (recyclables, food waste, hazardous waste, and the rest).

Waste incinerators were mass constructed in Japan during 1980s and 1990s, whereas international and national investors started promoting incineration/ waste-to-energy incinerators in Vietnam from the years of 2010s.

Several big incinerators and hundreds of mini ones through out of Vietnam have been using the mixed wastes as inputs, including a large part of plastic wastes.

In many provinces of Vietnam, the mini-incinerators are considered as a right solution to treat household solid wastes. This information is flooded in the local and online newspapers that encourage other places to build similar ones regardless of dioxin and furan emissions.

Japan has issued the Act on Special Measures against Dioxins since 1999 because they realized a seriously problem of dioxin emissions from waste incinerators. In Vietnam, unlike Japan, incinerators and especially waste-to-energy incinerators are considered as an advanced technology to solid waste treatment[18].

4. Cost-Benefit of Waste Management Scenarios

The **Table 4** below estimates the operational costs of the basic zero waste system interventions (separate collection, recycling, and composting) and those of a waste disposal system (waste-to-energy incineration and landfills). Regardless of the income bracket the countries belong to, recycling and composting costs per ton are consistently lower than that of landfilling and strikingly lower than that of waste incineration.

18 https://congnghiepmoitruong.vn/ca-nuoc-hien-co-khoang-15-du-an-dot-rac-phat-dien-dang-duoc-trien-khai-xay-dung-12260.html

Table 4 Cost estimates for discrete waste operations (USD/ton)

	collection		recycling		composting		incineration/WTE		landfills	
	low	high	low	high	low	high	low	high	low	high
Lower Income Countries	20	50	0	15	5	30	N/A	N/A	10	30
Lower-middle Income Countries	30	75	5	30	10	40	40	100	15	40
Upper-middle Income Countries	50	100	5	50	20	75	60	150	25	65
High Income Countries	90	200	30	80	35	90	70	200	40	100

Source: World Bank (2018). What a Waste 2.0

GAIA (2020) has also explored three waste management scenarios: [**Figure 4**]

1. a zero-waste optimized scenario (in which the potential for source-separated collection, recycling, and composting is maximized)
2. a landfill-heavy scenario (in which 100% of waste is sent to landfills)
3. a WTE-heavy scenario (in which 100% waste is sent to WTE, and 30% of waste still requires to be landfilled as incineration ash)

Both the WTE scenario and the landfill scenario show a drastic increase in expenditures per ton of waste processed compared to the zero-waste scenario. Heavy reliance on WTE incineration is the most expensive waste management approach, with estimated costs amounting to three times the costs of landfill operation and up to five times the costs associated with recycling and composting. Implementing a better collection and recycling/ composting system would reduce per ton waste management costs by 66-75% across three country income categories; 66% in high income countries compared to the WTE-heavy scenario; 70% in upper middle-income countries; and 75% in lower-middle income countries (GAIA, 2020)

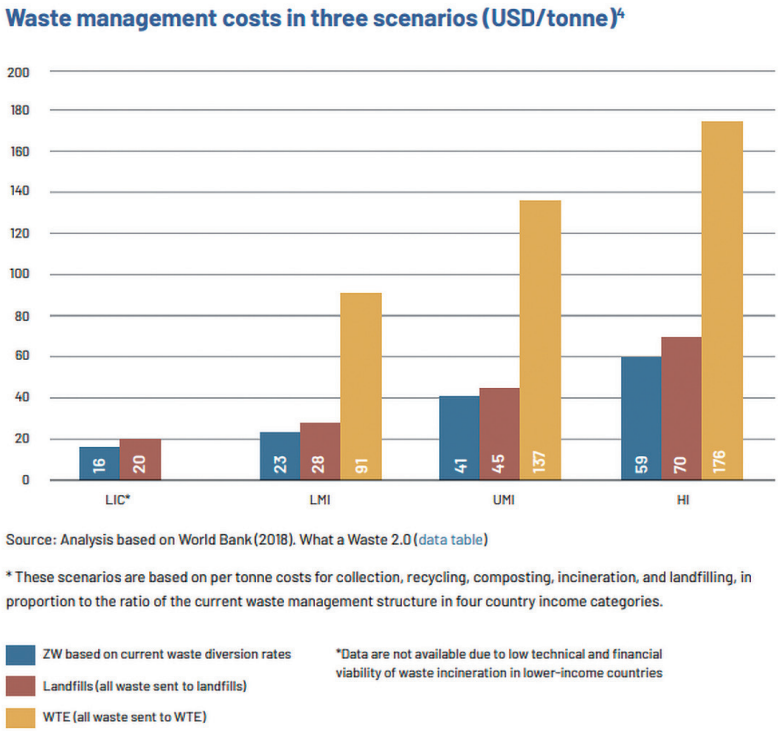


Figure 4 Waste management cost of different scenarios for different income levels

Let's consider an example city of 1000 tons of waste per day, the two scenarios of waste management are waste-to-energy incineration and zero waste practices for 1000 tons of waste in assumption. The waste compositions are assumed at 55% of organic wastes, 20% of recycling wastes, and 25% of residuals.

In the zero-waste scenario, wastes are sorted properly at sources and all the recyclable sorted wastes are recycled and/or composted, the residuals are dumped in the landfill. With the scenario of incineration, mixed wastes are collected and transported to the incineration plants. The residuals are 25% (ashes) and assumed to be dumped. Three different options of cost are used to calculate the total cost of the two-waste management scenarios.

Table 5 Costs of different waste management scenarios

Scenarios for 1,000 tons	Zero Waste Scenario (A)				B-A	Mixed waste incineration (B)		
Items	Collect	Recycle	Com-post	Dump		Collect	Inciner-ate	Dump
High-cost option								
Total wastes (Tons/day)	1,000	200	550	250		1,000	1,000	250
Treatment unit cost (USD/ton)	75	30	40	40		75	100	40
Composition cost (USD/day)	75,000	6,000	22,000	10,000		75,000	100,000	10,000
Total cost (USD/1,000 tons)	113,000					185,000		
Social saving compared to the scenario B (USD/day/1,000 tons)					**72,000**			
The cost that the city has to pay	75,000			10,000		75,000	50,000	10,000
City saving compared to the scenario B (USD/day/1,000 tons)					**50,000**			
Low-cost option								
Total wastes (Tons/day)	1,000	200	550	250		1,000	1,000	250
Treatment unit cost (USD/ton)	30	5	10	15		30	40	40
Composition cost (USD/day)	30,000	1,000	5,500	3,750		30,000	40,000	10,000
Total cost (USD/1,000 tons)	40,250					80,000		
Social saving compared to the scenario B (USD/day/1,000 tons)					**39,750**			
The cost that city has to pay	30,000			3,750		30,000	20,000	10,000
City saving compared to the scenario B (USD/day/1,000 tons)					**26,250**			
Average cost option								
Total wastes (Tons/day)	1,000	200	550	250		1,000	1,000	250
Treatment unit cost (USD/ton)	52.5	17.5	25	40		52.5	70	40
Composition cost (USD/day)	52,500	3,500	13,750	10,000		52,500	70,000	10,000
Total cost (USD/1,000 tons)	79,750					132,500		
Social saving compared to the scenario B (USD/day/1,000 tons)					**52,750**			
The cost that the city has to pay	52,500			10,000		52,500	35,000	10,000
City saving compared to the scenario B (USD/day/1,000 tons)					**35,000**			

Table 5 shows that in any case, the zero-waste scenario helps to save money for society or for the city of 1000 tons of waste per day, about $30,000 to $50,000 each day. Waste-to-energy is the most expensive way to produce energy and treat waste. In addition, incineration discourages waste sorting at sources, damages the recycling system, and removes the job and earning opportunities of waste pickers. It also causes environmental pollution with its ashes and emissions of toxic pollutants such as dioxin and furan.

5. Conclusion and Recommendation

During the 1960s and 1970s, Japan faced a municipal waste problem due to rapid population and economic growth. Landfills were scarce, particularly in major cities. The "War against Waste" in the Tokyo Metropolitan area in 1971 raised awareness about the severity of the waste issue in daily life. This led to a realization of the need for government organizations and residents to collaborate in order to enhance waste management. In the 1980s, the lack of landfills also made it difficult to prevent combustible waste from being landfilled without incineration. However, there was an increasing concern among residents that the incineration of wastes containing plastic would produce dioxins and the flue gases from plants would harm the health of nearby residents. Anxiety about dioxins generated by waste incinerators increased residents' concern over incineration facilities, providing impetus to opposition movements against the construction of incinerators. Japan's waste management strategy was changed, incineration was no longer the first choice, its priorities were (1) reduce, (2) reuse, (3) recycle, (4) thermal recovery, and (5) proper disposal.

Japanese Government had issued different versions of waste management acts, one after another, the Waste Management Act in 1991, the Law Concerning Special Measures against Dioxins (1999), Food Recycling Act (2000), and Revision of the Waste Management Act (2000) which promoted 3R and discouraged waste incineration. As a result, of particular note, (i) the amount of final disposal waste reduced from 20 million tons in 1980 to 4.6 million tons in 2012 for municipal waste

and from 91 million tons in 1985 to 12 million tons in 2011 for industrial waste [MOE,2014]; the number of incinerators decreased, from 1318 in 2005 to 1221 in 2010; (ii) the emissions of dioxins and dioxin-like compounds in Japan were successfully reduced from 5,000 grams in 1997 to 64 grams in 2004 [UNEP,2013].

The waste crisis in Vietnam has been like the situation of Japan in the period from 1980s to 2000s. Waste per capita of Japan reached the peak in the year (2000) of implementing important waste reduction and management policies. This phenomenon may happen in Vietnam in the year of 2024 or 2025 given the important policies of waste management in Vietnam will be enforced from 2025.

In my opinion, these are the experiences of Japan that Vietnam could learn from:

1. It's important for government organizations and residents to work together to promote waste management and implement strategies to develop waste management facilities that are environmentally friendly. This includes mobilizing the consensus and participation of the people and stakeholders in implementing state policies on solid waste management.
2. Law enforcement should be strengthened, and the "Polluter-Pays Principle" should be strictly adopted. Policies to reduce waste, such as the widespread use of 3Rs (reduce, reuse, recycle), banning single-use plastics, implementing extended producer responsibility, limiting scrap imports, and promoting a circular economy with a focus on food waste composting, should be implemented.
3. The policy focus should shift to waste prevention by applying the zero-waste hierarchy, which prioritizes waste management in the following order: refuse, redesign, reduce, reuse, recycle, recovery, rot, and residual management.
4. Proper disposal of solid waste should be prioritized, and the number of waste incinerators should be limited. Focusing too much on incineration eliminates the incentive to reduce, sort, and recycle waste, which has contributed to Japan having the lowest recycling rate in the OECD.
5. Operating instructions for unavoidable domestic solid waste incinerators should be developed and well implemented.

6. Education and communication are the foundation for raising responsible future generations that will help address waste and plastic waste crises in Vietnam.

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Comments

In this session, we listened to three presentations to comprehend the Japanese approach to sustainable development. The presentations were as follows: a comparative study between Japan and the Philippines on disaster-related Corporate Social Responsibility (CSR) project implementation in Japan and the Philippines; a comparative study on plastic recycling in Japan and Malaysia; and a study on waste incineration and solid waste management in Vietnam and Japan.

The rapid economic growth and urbanisation occurring in Southeast Asian countries have made waste management and recycling of waste plastics increasingly important issues. Governments and the private sector are expected to play active roles in environmental issues and disaster responses.

Japan has established expertise in waste management and recycling, with both the government and private sector playing major roles in driving progress. Therefore, it is reasonable to expect that examining Japanese case studies will contribute to solving the associated challenges faced by Southeast Asian countries.

At the same time, I believe, there is another background and importance to the comparative research undertaken by these three projects. This is because global issues, such as environmental problems and natural disasters, extend their influence beyond national borders. Some developed countries, including Japan, rely on East and Southeast Asian countries for waste treatment and recycling. Therefore, addressing waste treatment and recycling issues in Southeast Asian countries requires the interest and involvement of developed countries, including Japan.

Although the reports on these three projects do not highlight this point, I am grateful for the opportunity to reflect on Japan's relationship with Southeast Asia through these studies.

I would like to offer my compliments to the presenters of three projects for overcoming the difficulties and reaching the stage of presenting the results of the research. During your research project, you had to change parts of your research plan when faced with various challenges, including the COVID-19 pandemic, which was not foreseen at the project's inception.

Some of the unforeseen problems at the start of the project may have originated from the research programme. As mentioned earlier, these three projects address important issues in relations between Asian countries and Japan. Therefore, from the perspective of project management, which is to produce research results within a limited timeframe and budget, all three projects attempted to tackle rather ambitious research topics, given the size of the research grants.

One challenge was that the scope of the research encompassed everything from national legislation and policy to practices in local governments and the private sector, making it too broad to collect a comprehensive data set. Each of the three projects used published reports and articles on the internet, which were then compared with interviews. The results of the case studies in each country can be assessed to provide reliable data.

However, if the comparison between Southeast Asian countries and Japan is not clearly defined or the data are not thoroughly analysed, the result may be a superficial comparison of figures that may distort our understanding of the facts.

For this reason, I think it is appropriate to take the comparisons of Southeast Asian countries and Japan in these studies as tentative conclusions rather than definitive conclusions to acknowledge the various limitations. These comparisons should serve as reference points for similar studies in the future.

Having acknowledged this, I now examine these three studies individually and discuss the implications of their findings.

(1) Corporate CSR activities during the pandemic

The project selected the COVID-19 pandemic as a case to conduct a comparative

study of corporate CSR activities in the Philippines and Japan. The COVID-19 pandemic was an unprecedented situation for modern human society, and we attempted to respond to it partly by drawing analogies with natural disasters, which humanity has had experience dealing with for a long time.

By considering the parallels to natural disaster responses, the intent and significance of the study will become clearer and will provide insights into which CSR activities are ideal in response to natural disasters.

This research considers the response to a pandemic as divided into two phases: the emergency response phase and the recovery and rehabilitation phase, which are similar to a disaster response. During emergency response, the main support is to provide the affected population with the supplies they need to survive, such as water, food, and medicines. In subsequent recovery and rehabilitation phases, assistance was provided to rebuild houses and livelihoods. This is consistent with the fact that the study found there were more donation activities in the emergency response phase and livelihood support in the recovery phase.

However, there are clear differences between pandemics and natural disasters. For natural disasters such as earthquakes and typhoons can damage lives and property, the immediate hazard ends when the damage occurs, and emergency assistance begins.

Unlike natural disasters, famine and poverty are persistent challenges that progress gradually. Therefore, it is often not the focus of emergency response because it does not exhibit any apparent rapid changes. Furthermore, the hazardous situation is still ongoing when emergency assistance begins, and the damage may continue to increase in parallel with relief efforts.

In disaster response, the scale of damage can be approximated at an early stage, and the amount of supplies needed can be calculated, allowing for planned assistance. In contrast, the scale of damage experienced during famine and poverty is difficult to calculate, and the situation progresses daily, making it difficult to predict when and how much assistance should be provided.

The COVID-19 pandemic was responded partly by drawing analogies with nat-

ural disasters because it started suddenly; however, the continuous spread of damage made it difficult to predict when it would cease. Therefore, CSR projects during a pandemic may have more in common with responding to famine and poverty than natural disasters.

Concerning this, could you elaborate on what the project has found about different regions in the Philippines? Natural disasters such as earthquakes and typhoons cause direct damage in some regions of the country, while other regions are not affected, while the COVID-19 pandemic affected all regions of the country.

In countries such as the Philippines, economic activity is concentrated in the metropolitan areas. Are the 20 companies interviewed in this study primarily operating in Metro Manila or other provinces? In which regions did they conduct their CSR activities? Please provide additional explanations as to the findings this project would provide if it looked at the differences between the national capital region and the rest of the country.

(2) Recycling waste plastic recycling

The second project is a comparative study of the legislation and regulations on plastic recycling in Malaysia and Japan. The aim was to capture two typical patterns in developed and developing countries by comparing cases from Malaysia and Japan. However, the context of this project lies in the relationship between Malaysia and Japan regarding plastic recycling.

Japan is the world's third largest exporter of waste plastics, and until 2017, half of its waste plastics were exported to China for processing. Since China banned the import of waste plastics in 2018, Japan has begun exporting waste plastics to Southeast Asian countries such as Thailand, Indonesia, and Malaysia. Plastic recycling in Malaysia and Japan is, therefore, including an issue regarding the export of Japanese waste plastics to Malaysia.

The project involved interviews with plastic recycling operators in Malaysia and Japan. This study is useful for considering recycling issues as it contains many real voices from the parties involved. However, because of the amount of informa-

tion provided in the voices of the parties involved and the fact that their statements were taken in their original, unedited form, I felt that it was difficult to grasp the context of their statements in light of the discussions in this study.

Rather than transcribing all the statements made in the interviews, it would have been better to highlight the necessary parts in light of the arguments of this study and to accompany them with analysis and discussion so that the overall argument is clearer.

Although each point of discussion provides an interesting argument, their authenticity was not confirmed by any other source, which gave the impression that they were speculative.

A notable example in the conclusion section depicts a strong negative sentiment towards plastic recyclers in Malaysia because of the perception that plastic recycling is associated with gang activities. I wonder whether it is fair to conclude that this is a general fact in Malaysia.

There are several domestic and foreign recycling companies operating in Malaysia. The validity of the statement that they are associated with gang activity is highly questionable. Perhaps this statement may only apply under specific conditions, and the lack of clarification regarding these conditions may have led to this confusion.

One reason for the vague comparisons between Malaysia and Japan may be that the comparisons were made at the national level. It might have been better to choose localities, such as cities or districts, as comparative case studies.

Malaysia has a federal system with jurisdiction divided between the federal and state governments. Most states in Peninsular Malaysia have had the same federal and state ruling parties since independence. However, in the 2000s, it became common for federal and state governments to have different ruling parties in Malaysia.

As this project shows, solid waste management legislation has only been implemented in seven states. It has not been implemented in three states with relatively developed economies on the West Coast and in two oil-producing states on the East

Coast.

Can you provide any additional explanation as to what findings might be obtained if the study is viewed in terms of the differences between states in Malaysia?

Another point of discussion that I found interesting was the mention of chemical recycling.

The most important aspect of plastic recycling is to obtain homogeneous and clean raw materials. When waste containing plastics is disposed of and transported together with other waste, it is costly to obtain homogeneous and clean raw materials. Separating and collecting plastic from other waste at the source, such as in each household, can reduce sorting costs.

This project introduces the potential of making polyethene from raw materials that are halal instead of cleaning plastic products for recycling. Malaysia was the first country in the world to introduce a halal certification system, a governmental certification for products that have been treated or processed properly, as prescribed by Islamic law. The establishment of a chemical recycling technique to produce plastics from halal raw materials, instead of mechanical recycling practised in many countries around the world, could open up new pathways for plastic recycling.

The use of polyethene made from halal raw materials seems to mean that when the product is recycled, it is guaranteed to have been treated or processed in the proper way as prescribed by Islamic law. In that case, please provide a supplementary explanation how this relates to the recycling of plastic products.

(3) Incineration of waste

The third project is a study on waste management in Vietnam and Japan, focusing on incinerators.

Japan's general waste volume peaked in 2000 and has been declining since then. This project aimed to examine the effectiveness of Japanese law enforcement by investigating four waste disposal laws issued around 2000. Japan disposes most of its waste by incineration, with 20% recycled and 78% incinerated waste. Its recy-

cling rate is the lowest among OECD countries.

European countries have a history of waste reduction through recycling, with fewer landfills. In contrast, Japan always has landfilled waste; however, because of the country's mountainous terrain, large areas of land for landfilling are not available, and the method of incinerating and landfilling waste has been adopted. Incineration can produce hazardous waste; therefore, technical measures have been implemented, such as the development of high-temperature furnaces.

This study traces the development of legislation regarding waste management in Japan from the 1970s to the present. It then links the enactment of several laws on waste treatment and recycling around 2000 to the decrease in the amount of waste disposed of after 2000 and concludes that Japanese law enforcement is effective. The study also identified six items in its conclusion that Vietnam could learn from Japan, the second of which emphasised the need to strengthen law enforcement.

The enactment of legislation is certainly important, and, as this study illustrates, Japanese people may have become more aware of the need to review their lifestyles and reduce waste through the annual 3R promotion national conference organised by the Japanese Ministry of the Environment.

However, I think there is room for debate regarding the effectiveness of Japanese law enforcement in increasing awareness of lifestyle habits related to waste management. There are several reasons for reducing waste in a person's daily life; for legal reasons, to avoid fines and punishments; for neighborliness, not wanting to look bad to other people; and for the moral idea that it is not good to produce waste. Based on my observations, I have an impression that the neighborhood views and moral awareness are more significant than the law.

Please provide any additional explanations, as you have concluded that Japanese law enforcement is effective based on information not contained in the report or from comparisons with Vietnamese cases.

Vietnam also has something in common with Japan; it has relatively less land for landfilling, as it is long, narrow from north to south, and mountainous. What direction does your research recommend that Vietnam should take in waste management, moving towards incineration like Japan, or moving in the direction of no waste?

This study examines the current situation in four cities and regions in Vietnam using specific data on waste disposal by incineration. It also examined zero waste in Vietnam by estimating the costs of each scenario. But the conclusion simply lists Vietnamese and Japanese examples and the comparison between the two direction is not clear.

It states that incineration prevents waste from being sorted at its source, undermines the recycling system, and deprives waste collectors of work and income opportunities. Am I correct in understanding that this study concludes that the preferred direction is towards zero waste rather than incineration?

4 リプライと総括 Reply and Wrap-up

園田 茂人：

それでは第１セッションの質疑応答に入りたいと思います。すでに澤田先生から質問が出ていますので、孫先生と楊先生、それぞれにお答えいただければと思います。

孫 栄奭：

澤田先生、貴重なコメントありがとうございました。質問にお答えします。

まずコーパスの資料としてテレビ放送を使った理由について、ご説明いたします。

テレビ放送は、言語行動を研究するために作られたものではないので、多くの問題点を抱えています。第一に、得られたデータがテレビ放送に特有な傾向を示している可能性があります。また、テレビの画面は絶えず動きますので、話し手の持続的な言語行動を観察したり、細かな非言語行動を記述し、聞き手との相互作用を考慮した分析をしたりすることが難しいといった特徴を持っています。ですので、テレビ放送以外のデータも利用して解釈する必要があります。とはいえ､テレビ放送は私たちにとって身近に存在するメディアで、大量かつ多様な発話と発話場面データを比較的容易に得ることができるといった利点があります。これらの利点は私たちの研究にとって重要でしたので、テレビ放送を利用しました。言語行動はいろいろな要因によって変化するので、どうしてもデータ量が欠かせません。

今日の発表では、言語行動と非言語行動との関係にのみ焦点を当てて報告しましたが、南不二男「談話行動論」（1987）によれば、このような言語行動に何人関わっており、彼らとの関係がどのようなものか、電話を使って話をしているのか、それとも対面なのかなど、様々な要素によって言語行動は

変わります。ですので、どうしてもデータ量が必要になる。そのためテレビ放送を利用しました。

番組は無作為に選んだわけではなく、対談番組に絞っていますが、中でも対談している人が４名以下のものに限定しています。中にはインタビュー形式のものもあれば、自由対話形式のものもあり、話し手と聞き手の間に予め役割が決まっているものも、決まっていないものもあります。４名以下の番組に絞ったのは、言語行動の主体の数を少なくする必要があったからです。

このようにしてテレビ放送からコーパスを作ってみましたが、最近では澤田先生のご指摘にあったように、自動テクスト化もできるようになっています。40 時間分の対談を文字起こしするにあたって、専門の業者に依頼して６名が３か月かけて、すべての対談内容を手書きで文字起こししました。ですので、お金もたくさんかかりました。ところが最近では自動テクスト化ができるソフトウェアが開発されているので、もっぱらこのソフトを使うようにしています。たとえば映像 KWIC 自動生成ソフトウェアを利用すると、利用したい動画やアニメを入れると、自動的に日本語や韓国語の文字起こしができるようになっています。また字幕を映像とともに見せることができます。もちろん検索もでき、キーワードを入力すると、このキーワードが使われているテクストが一覧化されて表示されるようになっています。しかも動画を複数同時に入力して、作業を進めることもできます。こういったソフトは公開されており、誰もが使えるようになっています。

澤田先生の「謙譲性が言語行動に影響を与えうる」とする指摘については、今まで考えたことがありませんでした。ですので今後、この点も考慮に入れて研究を進めていきたいと考えています。

園田 茂人：

孫先生、どうもありがとうございました。

我々も研究をしていて、第三者の方にご指摘いただいて、新しい研究の方向性が見えてくるといったことがよくあります。例えば、ご報告の中で扱われていた視線の送り方は、言語学よりは行動学が扱う領域だと思いますが、孫先生の場合、言語の選択という問題と視線の送り方という行動学の交叉領

域で研究をなさっているわけですね。また、今回はたまたま日本語と韓国語の対比をされていますが、扱う言語の数を増やすことで普遍的な命題を作ることができます。韓国語や日本語のように、謙譲性を内包しやすい言語同士で比較する場合と、こうした謙譲性をあまり含まない言語と対比する場合とでは、得られる結果が異なるかもしれません。

ともあれ、孫先生が扱われたテーマが発展可能性を持っているのは明らかで、そのような研究が進められていることを喜ばしく思います。

それでは楊先生、お願いします。

楊 素霞：

澤田先生、貴重な意見をありがとうございました。以下、二点についてお答えしたく思います。

まず、(学術研究者、日本語世代、通俗書といった) 三つの類型についてです。

このうち日本語世代は、国民党の支配に対抗し、自らのアイデンティティを確立するために、日本を意図的に利用し、みずから日本の支配を体験している層でもあります。また学術研究者は、第二次世界大戦期にまともな教育を受けることができず、教育を受けられるようになったのは戦後になってからという特徴があります。ですので、彼らは国民党政権のイデオロギーを内面化したものの、後に「なぜ自分たちはこのような理解をしているのか」と自省することで学術を展開してきました。最後の通俗書ですが、これが大量に市場に出回るようになったのが 1990 年代以降で、21 世紀になってその量は増えることになりました。通俗書の中には翻訳されたものもありますが、その執筆者の多くが 1960 年代以降に生まれた人たちです。このように、世代的に異なった三つのタイプとして理解することができます。

次に、司馬遼太郎の『坂の上の雲』のように、通俗書が大きなインパクトを与えたということは、台湾では起こっていません。趣味の範囲で明治維新を記述したものがほとんどです。もっとも台湾の李登輝総統が司馬遼太郎さんと 1994 年に対談をしましたが、この対談は台湾社会に大きな影響を与えました。多くの台湾人は李登輝さんを「台湾人としてはかわいそうな存在だ」と見なしたのですが、これも李登輝さんが日本語世代の心情を代表しており、

それ以降の世代と異なる心情を吐露していたからです。

園田 茂人：

Zoom のチャット欄に「どうやったらコーパスが入手できるのか」といった質問が入っていますが、これにはすでに孫先生が個別にお答えになっています。

孫先生と楊先生の報告を合わせて「比較の力」という言葉で表しましたが、その力はどのように発揮できるのかといえば、今後より多くの対象を扱うことができる「仮説」を作ることに資する点にあります。たとえば孫先生のご研究の場合、言語行動と非言語行動の関係性を多言語で研究するようになれば、どのような知見を得ることになるのか。また楊先生の場合、この 40 年間急速に政治環境が変化してきた韓国と台湾を対象に、その明治維新認識の変化を比較されましたが、ではこの 40 年間、あまり政治環境に変化が見られなかった国を比較対象にした場合、韓国や台湾と異なる知見を得ることになるのか。もし共通した変化が見られたとすれば、それはどのような理由からなのかといった、新しい学問的課題が出てくることになります。

このように複数の国を射程に入れることで、議論をより普遍的な水準に昇華させることができる。これこそ、比較の力にほかなりません。今日のお二人の報告と澤田先生のコメントは、この比較の力の潜在力に焦点を当てるものでした。

それでは第２セッションの方に移りましょう。

SONODA Shigeto:

I think Prof. Yamamoto's comments are quite fundamental and critical. I'm afraid to say that the time is limited, so please pick up the questions that you think you are ready to answer. First, Prof. Alampay, please.

Erwin Gaspar Alday ALAMPAY：

Please allow me to thank to the Sumitomo Foundation today for giving me an opportunity to present.

The first question is about how I could compare CSR during the Pandemic to the natural disaster. I'll argue that CSR is really not comparable when addressing the issue of poverty. What I tried to highlight is that how CSR is integrated to the operation is important. How CSR can be integrated to the bottom-line, or to the operation during the Pandemic is crucial.

When it comes to the operation of the surveyed companies, almost all of them are national companies, and the scope of their operation is nation-wide. Only a few are operating outside of Manila. I'm sorry my sample size is very small, making it difficult to compare across regions considering the sample size. That's all.

SONODA Shigeto:

Ok, Prof. Kuan?

Seng How KUAN：

Thank you, Prof. Sonoda and Prof. Yamamoto. I'll be answering the two questions.

First, the question on whether the gangsterism is really related to the plastic recycling in Malaysia. The reality is such perception was there. When I conducted interviews with people from industry and the government, I realized that there was a perception that in 80s and 90s predominantly collecting plastic waste was connected to the gangsterism. Such perception was carried over today's views. People apt to think that those collecting the waste are carried out by the uneducated, dirty, and illegal people. But the reality is that there are legitimate companies in the country. Based on our interviews, it is evident that the legitimate companies get the legitimate permits and doing very good, and follow the rules. But as I wrote in a different paper, some plastic recycling companies opened their business illegally. They buy wastes from China, take away 20% of them for the recycling and make money, but the rest 80% are buried into the field illegally. The number here is from our estimation. Such companies created a bad reputation to the industry of recyclers. According to the interviews with the governmental officials as well as employees in the company, it is

very difficult to identify which is the good company and which is the bad company. These illegal companies are very hard to detect. From 2018 to 2019, Malaysian government tried to reduce the plastic recycling, and closed these illegal companies and shipment from Canada and Europe was turned back. Thus, this incident became an environmental as well as a political issue, and that also affected the negative perception of the plastic recycling.

The second question is on the comparison across municipality to municipality. In Japan, there are many may case studies on different local recycling systems and models. Kitakyushu's eco-town model is quite well-known. As I wrote in my paper, Malaysia can learn from and imitate Kitakyushu's eco-town model. But because we were interested in national scope, we didn't look into municipality level. But in Malysia, there are different types of government-state relationship, and each state has different contracts with concessioner in plastic recycling. I hope I've answered to the questions of Prof. Yamamoto.

SONODA Shigeto:

Thank you. Finally, I'd like to ask Dr. Quach.

Xuan Thi QUACH：

Thank you, Prof. Yamamoto, for your insightful comments.

First question is on the law enforcement in Japan. When I got the data from Japan, I noticed that the year 2000 was the peak of the waste. Of course there might be many reasons behind such a trend, but I thought it was because of effective law enforcement. As you know, Japanese citizens are said to follow the rules, not wanting to be looked bad by their neighbors. The year 2000 had a lot of new policies on waste reduction, and I speculated that such new acts brought about people's supportive attitudes toward waste reduction. That's why I thought Japanese law enforcement was effective.

While in Vietnam, even though a lot of laws were created in 2015, they were not implemented effectively. In 2020, Vietnam set a new regulation again, and start-

ed to implement it by the year 2050. I hope law enforcement in Vietnam will go as smoothly as Japan. Thank you.

SONODA Shigeto:

Thank you for all the responses. Prof. Yamamoto, do you still have something to say?

YAMAMOTO Hiroyuki:

After hearing their comments, I realized that Sumitomo Foundation should start a new scheme to encourage the presenters to apply for their follow-up projects on waste reduction, environmental issues, and so on. That's my wish.

SONODA Shigeto:

Thank you for your suggestion, Prof. Yamamoto. I basically share the same evaluation with Prof. Yamamoto toward the three presentations. For me, all three projects seem ambitious to capture the nature of a variety of issues, but the coverage seems too huge. I hope three presenters will have a more focus. But I know it's a paradox. In order to have a focus, you should have a wider knowledge of the phenomena. I believe today's presentations showed a great first step, but in order to take a greater second step, I think it better to have a more focus.

Secondly, in order to take a greater second step, I think it better for you to have a tighter connection with the scholars in Japan who might share the same interests with you. They might be interested in comparison with your countries, but they might be eager to do more. I wish you could find good research partners here in Japan to enrich your findings in your research. Then you might find easier to get a focus for the next project.

Anyway, thank you very much for your great presentations. Finally, I'd like to invite Mr. Hino again to say a few words, if any.

HINO Takatoshi:

Thank you very much, Sonoda-sensei, and thank you very much for your participation in this three-hour-long conference. Discussions were so lively, and I appreciate Sonoda-sensei's time management.

As I mentioned earlier, the Sumitomo Foundation aims at promoting mutual understanding between Japan and other Asian countries through this program. The period of this year's application will close by the end of this month. Those who are willing to apply, I encourage you to apply for our grant.

I'd like to conclude my remark by saying that I hope our Sumitomo Foundation's grant will be of some help to you. Thank you.

SONODA Shigeto:

Thank you, Hino-san, for your great encouragement. Now the time has come, and I'd like to close the session. Thank you for your participation, and good luck to all of you.

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