



Exploring the Transformative Agency of Youth Activists for Climate Change in Korea

Hyeonjeong Shin^{1*}, Da Yeon Kang¹, Sung-Eun Lim¹ and Sonya N. Martin^{1**}

¹ Seoul National University(Seoul, Republic of Korea) **sm655@snu.ac.kr



INTRODUCTION

- Climate change effects everyone on the planet and presents significant risks to our lives (World Economic Forum, 2019) in the form of a **'climate crisis'**. Today we live in a high 'Risk Society' where we face many complex social and environmental problems. By approaching these issues from a **socioscientific issue (SSI) perspective, educators can introduced political, issues-based and action-oriented science education** that empowers youth to consider how to balance social complexities and the economic, ethical, and political effects of various courses of action (Sadler & Zeidler, 2009)
- SSI can be used to guide students to achieve **'transformative agency'**, which is the will to influence the world (societal structures) and **the capacity to set goals, reflect and act responsibly to affect change** through responsible decisions and choices.
- In September 2019, about two million students around the world skipped school on Fridays as part of the 'School Strike Movement' to urge adults to take responsibility for climate change. This movement also inspired many **students in Korea to organize and attend their own Action for Climate Change event.**
- The purpose of this study** is to explore societal structures that supported and limited students to join the School Strike Movement for climate change in Korea and to understand how participation may transform students' agency in relation to climate change.
- We argue that transformative agency based on **the scientific literacy of vision III** (Sjöström & Eilks, 2018) should be an essential goal in science education to raising responsible citizens. For that, we need to more concrete discussion about the interplay between transformative agency and structures around it.

Research Questions

1. What understandings of the climate change issue shape youth activists' transformative agency?
2. What societal structures appear to either facilitate or constrain transformative agency in the context of climate change?

THEORETICAL BACKGROUND

1. Structure and Transformative Agency

- Structures are not social facts which exist apart from individuals, but sets of 'rules' and 'resources' which actors draw on, and hence reproduce, in social interaction" (Shilling, 1992). Individual agency and social structures are conceptualized as being mutually constitutive and highly interdependent.
- Archer's (2000) articulation of transformative agency as the capacity to develop new ideas and new organizational structures is important for our work.
- Hays (1994) proposed a view of agency as a continuum between structurally reproductive and structurally transformative agency. Structurally reproductive agency affirms or reproduces existing structures; whereas, structurally transformative agency creates new structures.
- In this study, we wish to stress that our conception of 'transformative agency' entails the ability to change the socio-cultural structure in a way that 'makes a difference'.
- In this research, we draw from these different views of structure to make sense of transformative agency in the context of addressing climate change in a high risk society that is increasingly facing a variety of climate crises.**

Further Research

- Analyze additional data sources (documents and news articles, documentary)
- Analyze all data more deeply using different methodological approaches
- Develop a model of transformative agency and define each area of the model to articulate how to inspire educators to create and transform existing structures into more expansive opportunities for student agency in science.

METHODS

1. Research Procedure

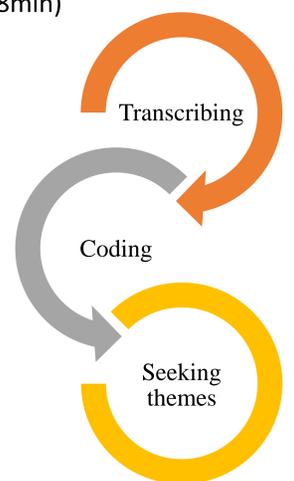
- Identify research questions and conduct literature review
- Held a seminar with the manager of the 'Youth action 4 climate change' group in Korea to made contact with Youth Activists.
- Ensured the triangulation of data sources to increase validity and reliability measures. Specifically, we collected multiple and different sources to analyze different approaches: phenomenological, grounded theory, content analysis.

A. Data Collection

- Semi-structured interviews**
 - 14 Youth activists (ages 14-18) who participated in at least one school strike.
 - Single in-depth interview (app. 60mins) and follow-up email exchanges to clarify comments.
 - Focused on student motivations and experiences in school strike event.
- Documents** : Collected statements and information from website of the group.
- Media resources**
 - 37 news articles (produced between 2019.3.1~2020.4.30)
 - 1 EBS (Korea Educational Broadcasting System) documentary video. (『Birth of Citizen #2, will it change?』2020.4.21, 48min)

B. Analysis Procedure

- Step1: Interview recordings were transcribed
- Transcriptions are analyzed using a grounded theory approach to develop codes and to identify themes from frequently recurring concepts and patterns
- Generated initial suppositions about the relationship between agency and structure and possible relationships among the categories



CURRENT PROGRESS

1. The (provisional) model of transformative agency

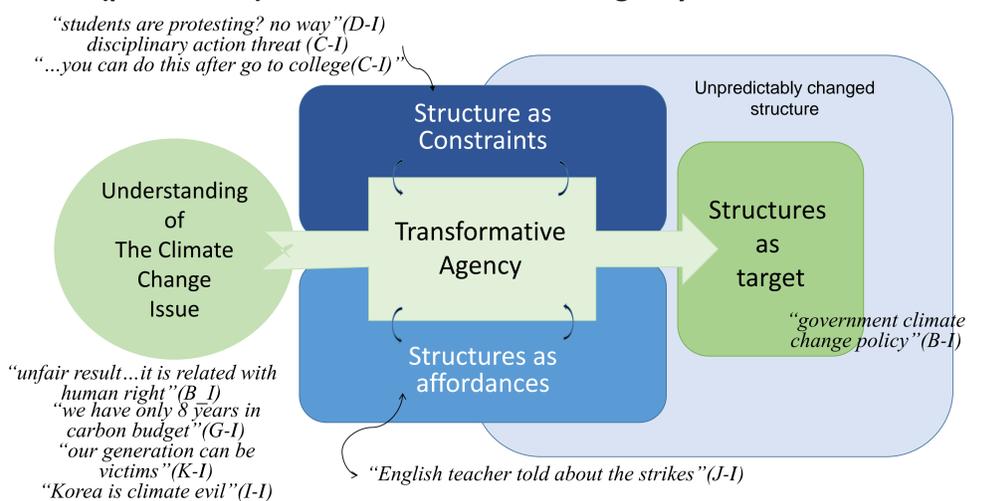


Fig1. The (provisional) model of transformative agency and data examples . (label: 'C' (student code) - 'I' (Interview))

2. Discussion

- Students could see that being agents of change can be extended beyond the individual level toward effecting social change that impacts the government's policy, both locally and at other levels.
- Teachers need to understand various roles of structures and achievement of the transformative agency to support students' critical awareness about SSI. It would be essential to achieve alternative and emancipatory goals in science education.
- The goal of this study was to identify what topics may serve as a foundation for fostering students' competencies for responding to climate change as stakeholders. These findings were used to develop socio-scientific issues (SSI) curricula that science teachers could engage as part of a school-based climate change education program to achieve more students' transformative agency.