





# UK Research and Innovation

The Social Life of Plastic: Programme (Day 1)

Thursday 7 <sup>th</sup> November	
09:00 to 09:20	Arrival and registration
09:20 to 09:30	Welcome and housekeeping
09:30 to 10:40	Public anti-plastic discourses and life-styles
9:30	Introduction
	Brigitte Steger, Japanese Studies, University of Cambridge
9:40	Seeing plastics: a visual analysis of the problematisation of plastics in the campaign
	'Jute instead of plastic' 1978 (Germany, Austria, Switzerland)
	Charlotte Bruns & Matthias Sommer, Sociology of Visual Communication and Media,
10.10	Naum Gabo: Inherent Vice
10.10	Robert Newton, Faculty of English, University of Cambridge
10·10 to 11·00	Coffee break
10.40 to 11.00	
11.00 10 12.50	'Plastic pollution' and plastics as pollution in Mumbai. India
11.00	Gauri Pathak, Department of Global Studies, Aarhus University
11:30	Plastics and everyday life: Exploring microplastics through a media lens
	Lesley Henderson, Social and Political Sciences, Brunel University London
12:00	A risky object? The politics of ascribing environmental and health risks to
	microplastics in German media.
	Ruth Müller & Sarah Schönbauer, Munich Centre for Technology in Society,
	Technical University of Munich
12:30 to 13:45	Lunch break
13:45 to 15:15	People's involvement in plastic waste reduction
13:45	Harnessing people's power to reduce plastic pollution through citizen science and
	action
4 4 4 5	Luca Marazzi, Science, Policy and Innovation, Earthwatch Europe
14:15	Socio-ecologies of plastic bottle waste (PBW) and the development of
	Oludele Maxewa Selaja, Department of Socielogy, Olabisi Onabanio
	University Ago-lwove Nigeria
14:45	Plastic waste avoidance in Germany: potential for new practices or wishful thinking?
1.1.0	Johanna Ritter, Institut für Sozialinnovation
15:15 to 16:15	Coffee break
16:15 to 17:45	Round table discussion
Drawing on the presentations, this panel brings together different perspectives from people working	
and thinking with plastics, inside and outside the university.	
Patrick O'Hare (Chair), Post-doctoral researcher, CirPlas, University of Cambridge	
Jennifer Gabrys, Department of Sociology, University of Cambridge	

Maria Antonieta Nestor, Founder/Director, A Toy's Life and Beyond, Cambridge

**Bryony Rothwell**, Partnership Manager, Cambridgeshire and Peterborough Waste Partnership (RECAP) **David Trotter**, Faculty of English, University of Cambridge







UK Research and Innovation

# The Social Life of Plastic: Programme (Day 2)

Friday 8 <sup>th</sup> November	
09:00 to 09:20	Arrival
09:20 to 10:50	Case studies on the social life of plastic
9:20	China's circular economy – Who is in charge of plastic waste recycling?
	Benjamin Steuer, Division of Environment and Sustainability, Hong Kong University
	of Science and Technology
9:50	Sandwiched between the sea and the city: The koli fishers of Mumbai and their love-
	hate relationships with plastic
	Lalatendu Keshari Das, Interdisciplinary Programme in Climate Studies, Indian
	Institute of Technology Bombay
10:20	Piles of plastic on darkening Himalayan peaks: changing cosmopolitics of 'pollution' in
	Limi, Western Nepal
	Hildegard Diemberger, Department of Social Anthropology, University of Cambridge
	Samanta Skrivere, Ministry of Waste, London
10:50 to 11:10	Coffee break
11:10 to 12:10	Case studies on the 'afterlife' of plastic
11:10	Comparing recycling and repurposing options and patterns of used car tyres among
	poor and affluent communities.
	Tendai Chiguware, Fort Hare Institute of Social and Economic Research, University of
	Fort Hare (South Africa)
11:40	Beyond 'single-use': towards a plastic politics of complexity
	Tridibesh Dey, Sociology, Philosophy, Anthropology, University of Exeter
12:10 to 13:25	Lunch break
13:25 to 14:55	Workshop
	Small group discussions to identify cross-cutting issues
14:55 to 15:15	Coffee break
15:15 to 16:45	Plenary
	Closing plenary discussion concluding with possibilities for publication led by Teresa
	Perez, Post-doctoral researcher, CirPlas, University of Cambridge
19:00 for 19:30	Dinner at Downing College (by invitation only)
10.00 /07 10.00	

Please note that participation is free but space is limited. **Pre-registration** is required in order to attend this workshop. Contact Teresa Perez <u>tp475@cam.ac.uk</u>

### **Venue Information**

Unless stated otherwise, all workshop presentations will take place at **The Needham Research Institute**, **8 Sylvester Road,Cambridge CB3 9AF**. For those staying at Murray Edwards College accommodation, this is approximately a 25 minute walk. Directions are available on GoogleMaps <u>here</u>. **Phone** +44-(0)1223 311545 | **Website** <u>http://www.nri.cam.ac.uk</u>

## The Social Life of Plastic: Abstracts

# Seeing plastics: a visual analysis of the problematisation of plastics in the campaign 'Jute instead of plastic' 1978 (Germany, Austria, Switzerland)

# **Charlotte Bruns & Matthias Sommer,** Sociology of Visual Communication and Media, Chemnitz University of Technology

The paper focuses on the problematisation of plastics within the public sphere. According to Baudrillard, "with plastics, man has invented an undegradable matter", "a simulacrum", "a project which aims at political and mental hegemony" (1993, p. 74). In our understanding, the interpretation of plastics is not merely inscribed in its materiality. It is rather a question of social representation and sense-making through the contextualization of plastic objects. In this study, we analysed the 'Jute statt Plastik' campaign ('Jute instead of Plastic') which started in Austria, Switzerland and Germany in 1978. The research question is how this campaign regulated "a politically mediated process" (Appadurai 1986) on the visual perception of plastics by communicating specific product semantics (e.g. the context of genesis, the operational, sociolinguistic and ecological context). To identify the strategies of problematisation, we used the method of comparative visual analysis (Goffman 1976, Müller 2012). We discovered scientifically unexplored material of the campaign (photographs, brochures, artefacts, reports, etc.) in the Swiss Social Archives, the Misereor Archive and the GEPA Archive. In order to refine the analysis, we carried out comparisons with advertisements for plastic products of the post-war era. With regards to current ecological movements, the paper outlines how the semantics of plastics is determined in the 'Jute statt Plastik' campaign in order to impose a specific way of seeing at plastics. The article discusses specific aspects of this process, such as (1) both the Jute and the plastic bags as political symbols, (2) the context of the product's genesis in which spaces of contestation are created where individuals can annex global problems into local practices and (3) the visual contextualisation of the Jute bag as a lifestyle product (which is still culturally implemented in today's society) in comparison to the "unappealing" plastic bag.

# Comparing recycling and repurposing options and patterns of used car tyres among poor and affluent communities.

# **Tendai Chiguware,** Fort Hare Institute of Social and Economic Research, University of Fort Hare (South Africa)

This paper looks at the lifecycle of vehicle tyres, their various uses and the challenges that come with recycling them. Despite the fact both car tyres and plastics are polymers, they present very different challenges when it comes to disposing of them after their expected lifespan. Unlike ordinary plastics, tyres are larger, take up space in landfills because of their large volumes and up to 81% void space and some components used in the manufacturing process like steel wire make them non-biodegradable. Other challenges presented by tyres include the fact that they easily cause fires because they trap methane gas, attract vermin when stockpiled and pollute the air when burnt. This significantly increases the challenge of recycling or getting rid of them. While there has been recycling success with tyres made from newer technologies like devulcanization and pyrolysis, environment friendly recycling options are still a challenge. This makes repurposing used tyres a much better option. This paper makes the argument that when it comes to repurposing tyres, there are two distinct uses amongst poor communities and well off communities. Drawing from experiences in Zimbabwe, amongst the well off, car tyres are used for entertainment and aesthetics, like barriers at car racing tracks and child swings at homes and in schools. On the other hand, poor communities, have multiple purposes for car tyres so much that the tyre is never thrown away as after each purpose, they always find a new purpose and its functionality keeps changing as it adopts new and changing roles. Because rural communities have multiple uses for old car tyres, with some of the uses breaking down the tyres to their last molecule, there is need to look at some of the rural uses of tyres and assess the adoption of these methods and practices for mainstream use.

# Sandwiched between the sea and the city: The koli fishers of Mumbai and their love-hate relationships with plastic

### Lalatendu Keshari Das, Interdisciplinary Programme in Climate Studies, Indian Institute of Technology Bombay

The occupation of fishing in the post-industrial age is unimaginable without plastic. Plastics are used to create nets of various mesh sizes. Plastics are used to carry water and other essential items when the fishers go to the sea. Plastic containers are used to transport fish and other aquatic fauna after the catch. Single use polythene bags are readily given to customers to carry fish from the markets. However, a mega city like Mumbai produces an enormous amount of non-segregated, non-recycled plastic waste that goes directly into the Arabian Sea. During the three months of monsoon this plastic waste not only chokes the number of creeks that cut across the city, but also pollutes these creeks as well as the sea water. The pollution caused by the plastic waste has affected the small and marginal fishers the hardest, as they fish in the immediate offshore areas in and around the Mumbai coast. This paper attempts to understand the predicaments of the fishers living in the coastal area of Mumbai in relation to plastic, both for its use value as well as waste value. I use the sociological concepts of 'life-world' and 'life chances' to argue that the supposed indispensability of plastics in the lives of the fishers is connected to the statist policies of modernisation of fisheries in the post 1970s and the changing narratives of hygiene and safety in the policies and politics of the industrialised west. As a consequence of commercialisation and modernisation drives, cotton nets were related by heavy duty nylon nets and bamboo baskets were replaced by plastic crates, similarly, cloth and jute carry bags were replaced by polythene bags. Therefore, it is necessary to understand the socially constructed aspects of plastic to articulate the dicey situation of the Koli fishers of Mumbai.

### Beyond 'single-use': towards a plastic politics of complexity

#### Tridibesh Dey, Sociology, Philosophy, Anthropology, University of Exeter

My work on plastics, currently within an academic anthropological-STS framework, extends on previous practical experience as sustainable development engineer in plastic waste recycling in small-scale rural habitations in Rajasthan, India. Working on the production-use-disposal-recycling (by mechanical breaking down, and new synthesis into pellets) circular economic model, implementation involved taking "post-use" plastic objects away from rural consumers, of whom some would instead re-use, or technologically transform these objects for employment in local everyday contexts. To generate discussion, I will tell the tale of an empty bag of crisps (polythene-aluminium-polythene layers vacuum sealed), transformed by one such local resident - an autistic woman in her 50s, deserted by family to her own limited means and devices, into a utensil scrub for quotidian use. I refer to Manuel Delanda to propose that actual material properties of things have a "multiplicatory role" (1995). Their various capacities emerge in complexes of relations they may find themselves embedded in and their ability to perform within these associations. Delanda's formulation offers a crucial openness to material affordances of particular (plastic) objects (tensile strength, durability, form, texture, colour...) – their capability to articulate action (Hawkins et al 2015), to make a difference (Bennett 2010), but also to disrupt, etc. The woman crumpling the aluminized crisp bag signifies agency, everyday inventiveness and active material (re)configuration, that goes beyond corporate intentionality and informed-ness (Barry 2005). Extending Barry's discussion (on materials being informed of future use and environmental contingencies at the point of manufacture in the industrial facilities), I argue that plastic objects may be re-configured and compounded (with other materials) beyond these corridors of capital and power – their plasticityongoing. Viewed as such, immutability of plastics (thanks due to stable hydrocarbon configurations) may be open to mute-ability (different from archaeological formulations about the ability to interpret mute-objects, rather a portmanteau on mutability – as discussed by de Laet and Mol (2000) regarding fluidre-configurations of bush-pumps in rural Zimbabwe – and subaltern agency.

### Piles of plastic on darkening Himalayan peaks: changing cosmopolitics of 'pollution' in Limi, Western Nepal

# **Hildegard Diemberger**, Department of Social Anthropology, University of Cambridge **Samanta Skrivere**, Ministry of Waste, London

This presentation sets out from the exploration of plastic pollution in a remote area of western Nepal that is currently undergoing rapid environmental transformations. In a confluence of events, climate changerelated floods are occurring just as motorable roads and telephone connections as well as new governance modes are arriving in places such as Limi, in Nepal's impoverished Humla district. With these new connectivities an increasing number of plastic packages, wrappings, containers and single-use plastic items are making their way to remote villages perched on the Himalayan slopes linking them to the expanding Chinese market (and to a lesser extent the Nepali and Indian ones). The advent of non-compostable plastic waste is a new phenomenon for the population and the psychological and cosmological shifts required across the generations in terms of how to manage these new forms of waste is proving challenging. Both old and new challenges require an infinite number of decisions at multiple levels, involving different forms of knowledge and moral frameworks in dealing with issues of causality, responsibility, prioritization and action. Setting out from fieldwork carried out in the framework of the international collaborative project "Himalayan Connections: Melting glaciers, sacred landscapes and mobile technologies in a Changing Climate", this presentation will offer an opportunity to reflect on the predicament of Himalayan people and contribute from this vantage point to the debate on plastic pollution as linked to a wide range of environmental challenges.

### Plastics and everyday life: Exploring microplastics through a media lens

#### Lesley Henderson, Social and Political Sciences, Brunel University London

Microplastic pollution is now in the public domain as an emerging issue of global concern however there is little known about how this issue is framed within media reporting and a dearth of studies exploring public understandings of the issue. In this paper, I explore how ideas about microplastics are mediated by culturally embedded notions of what is 'risky' or 'healthy'. Specifically, I explore the wider role of media in telling stories and creating "frames of understanding" about the environmental and health risks of (micro) plastics. This paper builds on a unique interdisciplinary study at Brunel University London which involved ecotoxicologists, sociologists, environmental scientists and natural history film makers. We used the adventure documentary film about the problem of single-use plastics, 'A Plastic Ocean', Netflix to explore wider ideas about the problem and contrasted this with a BBC news bulletin with similar messages. This project is the first to systematically analyse media content (across 1 year, 2014-15) and we also used online deliberative survey tools involving a nationally representative sample of the UK population to explore how people engage with media stories about the topic. Additional rich qualitative data were generated in 6 focus group sessions (involving water sports club members, arts students, community workers and young mothers living on a budget). The paper highlights how wider public perceptions of risk and health intersect with and may potentially also undermine messages regarding possible solutions to this problem and how we must learn from previous studies of media, science and publics if we are to develop culturally appropriate strategies to shape behaviour.

### Harnessing people's power to reduce plastic pollution through citizen science and action Luca Marazzi, Science, Policy and Innovation, Earthwatch Europe

Plastics have increased people's awareness and concern about their impact on the environment. This increased awareness provides an opportunity for policy action, industrial development and personal behaviour change amongst the general public. Proactive consumer action will play an important role in promoting change and supporting effective action. However, members of the public are faced with a bewildering array of choices to make to reduce their plastics footprint. Many of these recommendations lack quantitative evidence to support their activation. In particular, there has been limited testing of specific actions to help curb plastic pollution in freshwater ecosystems. Based on the identification of the most commonly occurring consumer based plastic items found in freshwater environments in Europe, we assessed reported actions to reduce plastic pollution in freshwater environments. We reviewed and scored these actions by means of Multi-Criteria Decision Analysis against criteria linked to feasibility, economic impact, environmental impact, other environmental unintended consequences, potential scale of change, and evidence of impact. We prioritised the most impactful actions and then examined their feasibility using a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis. The top ranked personal actions were identified as: switching to reusable water bottles; using wooden or reusable cutlery; disposing correctly of smoking related waste; using cotton buds with paper sticks; and using a reusable cotton tote bag. We address how stakeholders can support these actions to reduce mass of plastic pollution in the environment.

# A risky object? The politics of ascribing environmental and health risks to microplastics in German media.

# Ruth Müller & Sarah Schönbauer, Munich Centre for Technology in Society, Technical University of Munich

Microplastics, characterized as small plastic particles smaller than 5 millimeters, is increasingly populating the environment and human and non-human bodies. Its presence is accompanied by concerns about its potential environmental and health effects, visible in a rise in scientific research and in media articles on the topic. In our talk, we explore how microplastic is narrated in German media, and how it is increasingly treated as a 'risk object' (Hilgartner, 1992) that creates environmental and health threats. Our analysis draws on 501 articles published in German high-circulation media between 2004 and 2018, qualitative interviews with researchers and observations at scientific conferences. We show that the representation of microplastic in the media has developed in three phases: Starting in 2004, microplastic was depicted as an object that is found mainly in the oceans as a result of plastic degradation. It is framed as an inert object that does not pose any risks to the environment or human health in and of itself, while at the same it possibly harbors other risk agents, such as pathogens or toxins. In the second period (2010 – 2015), microplastic itself acquired risk characteristics and became a bioactive object that can cause environmental damage and human disease such as cancer, infertility or inflammation as it contains substances, such as the additive BPA, that mimic hormonal action. Microplastics were also rendered ubiquitous, described as found in many local environments (e.g. streams, drinking water, food) and tied to various sources (e.g. cosmetic products, clothing). From 2015 onwards then, the representation of microplastic has become more complex and indeterminate as the clear-cut risk narrative of the second period is increasingly challenged by voices of researchers and public officials, who assert that the risk status of microplastic is yet unknown and methods for reliable assessment are still being developed. Questions emerge whether the actions of microplastics are indeed different from those of "naturally occurring" particles. While media reporting affirms the need to reduce macroplastic littering and the need to reduce the use of toxic additives, they also return to a discussion of the risk status of microplastics "in and of itself", which is rendered less certain. Our analysis thus shows that notions of risk in media reporting on microplastics are inherently tied to underlying discussion about the ontology of microplastics and about what constitutes, in fact, a "microplastic particle".

#### Naum Gabo: Inherent Vice

### Robert Newton, Faculty of English, University of Cambridge

After moving to London in 1936, the sculptor Naum Gabo, who worked in both semi-synthetic and synthetic plastics, discovered what would become his preferred material: ICI's newly-synthesised Perspex. This paper explores how Gabo's layering of Perspex and semi-synthetic plastics in his 1938 sculpture 'Construction in Space with Crystalline Centre' is encoded with developments in industrial synthesis. How, the sculpture implies, might recent industrial developments act on the material imagination – on what Gabo called the 'sensation of space'? There has recently been a great deal of cultural work addressing the chemical persistence of plastics, but it is perhaps lesser known that plastic artefacts degrade structurally over time, through processes of 'shrinkage' and 'additive migration'. Unknown to Gabo, some of the materials he shaped into sculptural forms would warp, mist, crack and craze with the passage of time, revealing what is known, in the world of art conservation, as an 'inherent vice'. Since the 1930s, 'Construction in Space with Crystalline Centre' has partially decayed; its materials expressed unanticipated qualities. I ask what a contemporary synthetic consciousness does to alter perception of this sculpture.

#### 'Plastic pollution' and plastics as pollution in Mumbai, India

#### Gauri Pathak, Department of Global Studies, Aarhus University

Since their mass production in the 1950s, plastics, or synthetic organic polymers, have transformed our lives. The proliferation of plastics was initially seen as a marker of prosperity, abundance, and democratic mass culture. Now, however, plastics have come to global prominence as both the paradigmatic material and the emblematic problem of our late modern era. Within just the last decade, "plastic pollution" has emerged as a major global issue, and as a problem, it invites solutions. Consumer-citizens, volunteer groups, NGOs, environmental activists, urban beautification projects, entrepreneurs, scientists, academics, policy-makers, politicians, states, and non-state actors, among others, all engage with this problem. Yet, there is little consensus on what aspects of plastics constitute the problem, let alone a solution. Issues of aesthetic pollution (i.e., litter), lack of cleanliness, unmanaged disposal, lack of biodegradation, carbon footprint, and damage to national image are all variously associated with the term "plastic pollution." Stakeholders play a performative role, differentially and productively mobilizing the category of plastic pollution; with greater stakes, attention, and funding, it is increasingly in the interest of various actors to frame plastic pollution in particular ways that require particular kinds of interventions. In this paper, I investigate how consumer plastics are variously constituted and contested as pollution. Drawing from fieldwork in India, I provide examples of different understandings of plastic pollution and how these understandings result in varied, and often contradictory, interventions. In doing so, I aim to provide insights into how, for different stakeholders, plastics transition from being matter to being "matter out of place."

### Plastic waste avoidance in Germany: potential for new practices or wishful thinking? Johanna Ritter, Institut für Sozialinnovation

Environmental problems caused by plastics recently brought the topic of household waste back on the agenda in Germany, similarly to the times of the introduction of the dual system for separating packaging waste almost 30 years ago. But while awareness is growing and zero waste alternatives are emerging in urban niches, most consumers see little scope of action to avoid plastic packaging in everyday life. This is shown by the results of our research project "Sociological determinants of waste avoidance". Although plastic waste is perceived as a problem for the environment, consumption remains at a high level. The apparent contradiction between discursive valuation and practical use of plastics can be explained with regard to the stability and changeability of everyday practices. The above-mentioned project investigates the everyday practices of households that contribute to waste in general and plastic waste in particular. Practices are understood as patterns of action that are carried out routinely and without reflection in appropriate "arrangements" (Schatzki 2010), by means of material conditions, social settings, social meanings and competences. The view on aspects of everyday household management opens up possibilities for understanding the valuation of things inherent in everyday practices. The mixed-method approach in this study (online survey, interviews, group discussions), reveals these interrelations with regard to social milieus. On this basis, the milieu-specific potentials for waste avoidance are explored. How can the reflection on plastic waste change milieu-specific consumer practices in the sense of waste avoidance? Is it possible to achieve a similarly fruitful interrelationship of public debate, political will and infrastructures, which made waste separation a lived practice in Germany? From here on, this contribution focuses on the political and economic structures that offer practical arrangements for the avoidance of plastic waste in everyday practices.

# Socio-ecologies of plastic bottle waste (PBW) and the development of entrepreneurial initiatives in contemporary Nigerian society

### Oludele Mayowa Solaja, Department of Sociology, Olabisi Onabanjo University, Ago-Iwoye, Nigeria

The rate of plastic bottle waste generation has been acknowledged as interference to ecological, economic and social development in contemporary societies. This issue has generated serious concern among development experts and researchers as the World's plastic waste is estimated to reach 111 million metric tons by 2030 (Lorraine Chow and Ecowatch, 2018) due to the constant growth in demand and supply of plastic as part of everyday life across the world. With this foreseen state of affairs, it is therefore paramount that sustainable and efficient ways of managing plastic waste are adopted, developed and utilized in contemporary societies. In this regard, this study investigates the socio-ecologies of plastic bottle waste and the development of entrepreneurial initiatives in semi-urban areas of Ogun State, Nigeria. The study examines the dimension of plastic bottle waste generation and collection; plastic bottle waste trading; economic potentials as well as recycling of plastic bottle waste for industrial and domestic consumption. The study adopts a descriptive and explanatory survey design with the use of a semi-structured questionnaire and in-depth interview guide as instruments for data collection from 86 purposively selected ecopreneurs. The data gathered were analysed using descriptive and inferential statistics as well as qualitative content analysis. The findings revealed that the economic potentials of plastic waste are expanding as well as the social relationship among people with different cultural backgrounds. Also, the findings showed that plastic bottle waste trading is expanding as more individuals (especially the unemployed youths and women) ventures into waste mining and trading activities. Similarly, the findings discovered a gradual and tactical shift towards the use of recycled plastic bottle waste for industrial and domestic consumption. Hence, the study concluded that the socio-ecologies of plastic bottle waste have engendered the development of entrepreneurial initiatives in Nigeria. Yet, there is a need for further research in building more technical and vocational capacities for the management of plastic waste in Nigeria.

### China's circular economy – Who is in charge of plastic waste recycling?

**Benjamin Steuer,** Division of Environment and Sustainability, Hong Kong University of Science and Technology

After three decades of unprecedented economic growth and a subsequent deterioration of the environment, China's central government has taken steps to alter its development model towards increased sustainability. While various initiatives were set forth since the early 2000s, the hitherto most pronounced sustainable model is the Circular Economy (CE). Initially only the subject of discussion in academic circles, the Chinese government quickly elevated the concept to the rank of an industrial policy and established the CE's core principles "reduce-reuse-recycle" as a guiding strategy for waste management. Within this context, municipal solid waste constitutes a particularly significant stream for the CE as it contains large volumes of waste recyclables, such as discarded plastics, which once being recovered and recycled can be used as feedstock for production. This evident economic value inherent in waste recyclables has induced different actor groups to engage in recovery and recycling activities, which over time lead to a formation of two institutional (rule-based) domains: The "formal" sector such as public and private waste management services vis-à-vis the "informal" sector, which is mostly composed of unregistered waste collectors, traders and processors. Within this setting, instances of conflict as well as cooperation occur depending on the particular waste fraction and locally varying, regulatory environments. In order to provide a comparative and concise picture of this dynamic the present paper focuses on the issue of plastic waste and how it is recovered, transferred and pre-processed by the two domains. The herein discussed findings are derived from field research in the cities of Beijing (2013 and 2016) and Changchun (2018-2019), and are analytically treated via an evolutionary institutional economic framework. The purpose of this approach is to show how and under what circumstances institutional (rule-based) systems help actor groups to dominate waste recovery and recycling processes in China.