

The Dialectics of Space Subsumption, Struggle in Space, and Position of Localities

Fujio Mizuoka

Professor, Graduate School of Economics, Hitotsubashi University,
Tokyo, Japan
E-mail: fmizuoka@econgeog.misc.hit-u.ac.jp

Abstract

Society and space are elements in a dialectical separation within a unity. The former is in a position to subsume the latter. Once subsumption occurs, contradictions emerge, which must be negated through real subsumption: bounding and spatial integration. These socio-spatial dialectics are class- and ethnic-specific; thus, space subsumption is inevitably the contested terrain among different classes and ethnic groups. This article examines several spatial contradictions: the relation between the more institutionalized *Wirkungsraum* and the more anarchical *Aktionsraum*; networks with the inherent paradox to create spatial unevenness and struggles over “stray space,” class, or ethnically specific modes of territorial integration in the central-place system; and scale jumping. All these manifest the struggle

between *les représentation de l'espace* and *les espaces de représentation* (Lefebvre [1974] 1991). It is the task of critical geographers to propagate and explore this struggle and prove that space is indeed an indispensable element in waging a social battle.

Keywords: Subsumption of Space, *Aktionsraum*, *Wirkungsraum*, Stray Space, Scale Jumping, Central-Place System

1. Introduction: Subsumption of Space and Spatial Struggle

Society can never exist in the one-point world as assumed by sociologists and economists. Space is an integral part of social processes and structures, and thus space must be incorporated as an integral part of the logic of social science. Geographers are well-positioned to take up the task of discovering this logic, being in a discipline where dialectics between society and space have always been a focal point. Discussions and commentaries abound (e.g., Massey 2005 and Soja 1980) in contemporary geographical literature; yet few dialectical logics are systematic enough to provide a comprehensive understanding of the socio-spatial relations which have been put forward so far.

The author has previously presented the theory of society-space dialectics (Mizuoka 2002, 2008), in drawing upon the concept of “subsumption (包攝),” which was first put forward by Marx ([1867] 1977b) in his manuscript for *Capital: Critique of*

Political Economy. Although Marx theorized subsumption only with respect to production technology, the concept is powerful enough to be extended to wider physical phenomena that exist beyond the sphere of human society.

The theory of space subsumption leads us to various intriguing topics relating to socio-spatial dialectics. Of foremost interest to critical geographers is how space can be deployed as a means for class and ethnic struggles. The theory of space subsumption can offer many insights in this regard as its systematic corollary.

The positive role of space in social struggle has been discussed previously by some British critical geographers (Pile and Keith 1997). Space is indeed an indispensable means and vehicle for those in power to dominate society as well as for those oppressed to empower themselves and engage in a struggle against the dominant power.

Following this conception, this article attempts to build the dialectical logic of the socio-spatial relation on the basis of the concept of subsumption. It then examines various strategies of spatial struggles that emerge as a corollary.

This article first reviews in Section 2 the general concept of the subsumption of pristine space, an essential starting point in understanding the dialectics. Section 3 elaborates on the process of subsuming the pristine absolute space and social contests embedded in the process, especially around the

concepts of *Gesamteigentum* and the significance of commons to society. Section 4 discusses two types of territoriality produced through the subsumption of absolute space—*Wirkungsraum* (作用空間, exclusive territory) and *Aktionsraum* (行爲空間, action space)—and the contradiction between these. The principal point of this article is that this contradiction, which arises from whether the authority controls the territorial expanse, is closely related to the struggle around the power that dominates over the process of space production. Section 5 elaborates on the process of subsuming the pristine relative space and the paradoxical outcome of spatial integration with various networks. Attempts to recover spatial contiguity create an uneven configuration of space. The configuration of the networks is class- or ethnic-specific, is embedded with social contests, and is open for spatial strategy. Section 6 discusses a unique property of a place excluded from spatial integration: stray space. Such space can be used as the launch pad for insurgent activity while the dominant power attempts to put it under surveillance and suppress it. Section 7 discusses Christaller’s central-place system as the model of territorial integration with which the dominant power can “successfully” contain the anarchical nature of *Aktionsraum*. It then explains how the central-place system thus produced is class- and ethnic-specific and examines the possibility of an alternative central-place system under the domination of an alternative class or ethnic groups while putting

it in the context presented in this article. Section 8 is a brief revisit of the concept of “scale jumping,” a spatial strategy much discussed among Anglo-American critical geographers. This article concludes with Section 9 claiming the significance of spatial struggle and calling for spatial praxis for emancipation. In all, this article analyzes various possibilities of strategies where a pristine and produced space plays a vital role in waging class and ethnic struggle.

2. Dialectical Relation Between Space and Society

a) Subsumption of Space

Physical space came into existence with the “Big Bang” and has existed ever since. Everything in the universe is contained in space, and space is a prerequisite for the advent of the biological and human world, if only because all living beings have a spatial dimension and act across space and the societies that they organize need some form of physical container that supports their existence and functioning.

This fact may lead to the misconception that space and society should, logically, be always treated as an ensemble, a unified entity. They think that it is wrong to separate society from space. However, from a dialectical perspective, space and society are separated and it is always logically legitimate to analyze space separately from society. It is still in the logical

stage of Ding an sich (即自, thing in itself) or eine chaotische Vorstellung (a chaotic representation).

In fact, most social science theories are constructed by treating society as an entity separate from space, which could also be abstracted away from the theoretical body. Theories of economics and sociology are thus formulated as aspatial, or constructed without space, as an explicit logical element. Here emerges a dichotomy: one-point social science on the one hand and physical space on the other.

It is also possible in our daily awareness to imagine social relations without taking space into consideration. “Love” and “hostility” can, for example, be concepts that are wholly valid without taking space into account explicitly.

In our logical journey to bring space explicitly into a dialectical unity with society, pristine space—the simplest element in geography—is the starting point. The journey then passes through the dialectics of “space subsumption,” bridging the moments of society and space into a dialectical unity. On one side of the dialectics stands the moment of *pristine space*, an objective existence created through the “Big Bang.” On the other side, the moment of *society* is defined as the relationships among more than one person, where space does not necessarily enter as a logical element.

The socio-spatial relationship in “unity within separation” then transcends itself into *Ding für sich* (對自, thing for itself).

Here, society explicitly incorporates space through the production of space, whereby society and space enter into an explicit dialectical interrelationship.

Following Marx's concept of subsumption as put forward in his manuscript of *Capital*, in which he gives the example of artisanal technology being subsumed into capitalism, this process can be seen to emerge in two steps: a formal subsumption, followed by a real subsumption. In the *formal subsumption* (形式的包攝) of pristine space, as society deepens its relation with physical space, an increasingly hostile and contradictory relation develops between them. Eventually, quantity transforms into quality, which in turn leads society to purposefully transcend this contradiction by transforming the physical space itself. This is the process of the *real subsumption* (實質的包攝) of space, or what geographers and sociologists have referred to as the *production of space* (Lefebvre [1974] 1991).

The production of space means the process of reconfiguring the property of the pristine physical space, or an attempt by society to transcend the contradictions of the space formally subsumed. In the dialectical process of transcendence, society negates the adverse properties of the formally subsumed space and creates a new configuration that supports its needs and requirements.

The pristine space is a dialectical unity of two contrasting attributes: *absolute* and *relative*. The former refers to the spatial

expanse of a two-dimensional Cartesian surface and the latter relates to the individual points expressed in terms of x and y of the Cartesian coordinates. The existence of these two attributes of physical space was proposed by the physicist Einstein in his preface to *Concept of Space* (Jammer [1954] 2012), and Harvey endorsed it by quoting Einstein's passage positively (Harvey 1970).

For absolute space, the contradiction lies between the unlimited connectivity and propensity of equalization of pristine absolute space and the need to maintain the integrity and dependence of a social group or an individual. This contradiction is transcended by bounding, or the production of boundaries. For relative space, the contradiction lies between the separation and isolation of different spatial points and the need to connect the members in a group or the individuals in society at large with each other. This contradiction is transcended by spatial integration, or the production of transportation and communication. For both attributes, artificial, as opposed to pristine, configurations of space are produced. The pristine space is thereby subsumed in real terms. This process of space subsumption occurs in all modes of production and even among non-human creatures. In this sense, the process of space subsumption is trans-historical. More detailed discussions on this process follow in subsequent sections.

Having completed the process of real subsumption, space is to a certain extent virtually annihilated; that is, the produced space works to emulate a hypothetical “one-point world” or society without spatial barriers assumed in economics and sociology. Nevertheless, real subsumption of space is never perfect, as discussed in the latter part of this paper.

b) *Subsumption of Space and Class Society*

Society is not homogenous but is normally organized in a vertical power hierarchy. In a class society, the process of subsumption also assumes the class nature. Those in power play dominant roles in the process of space production. The configuration of produced space is therefore often class-specific. Each of the dominant and subordinated classes or ethnic groups has its own logic in subsuming and producing space.

Those in power deploy superior political and planning apparatuses to transcend the formally subsumed space into configurations that facilitate its domination. This is *les représentation de l'espace* in Lefebvre's terminology.

At the same time, the subordinated classes or ethnic groups also attempt to produce their own configurations of space, which challenge the dominant *représentation de l'espace* to break the spatial “straitjacket.” Lefebvre called the space thus produced *les espaces de représentation*, or space for the representation of the subordinated.

In a class or multi-ethnic society, the outcome of real subsumption of space is in itself ridden with contradictions. The spatial configurations thus produced can be composed of multiple layers or scales, each of which is class- or ethnic-specific. The interrelations between the scales can be as contradictory and struggle-prone as the relationship between the classes or ethnic groups concerned.

In this inter-scalar contradiction, one scale could undermine another. To forestall this struggle, the dominant power institutionalizes the boundary, keeps surveillance over it, and attempts to dominate and control spatial configurations created by the subordinate class or ethnic groups. Those in domination thereby attempt to integrate the multi-scalar set of territories in a way that supports their domination best (*territorial integration* or vertical coordination of multiple scales), in an attempt to contain the challenge for subversion from the subordinated. The territorial integration is thus the way by which those in domination substantiate their power, piercing the overlapping scales.

This, of course, does not exclude an identical scale being shared by different classes or ethnic groups, as in the case of the built environment. Those in domination then attempt to co-opt the subordinated class or social group.

The sections that follow discuss the class-specific processes of space subsumption for the absolute and relative attributes of

pristine space and the strategies of spatial struggle that come in corollary.

3. Subsumption of Absolute Space and Social Struggle

a) *Bounding: Real Subsumption of Absolute Space*

The absolute attribute of pristine space represents the property of infinitely contiguous, isotropic expanse and the potential of equalization between the phenomena contained in it. Once subsumed formally into society, absolute space functions both positively and negatively in relation to it.

In a positive sense, absolute space provides society with a container for any phenomenon, including the physical equipment necessary for production, living, and leisure—the human body itself. It also serves as a container of social relations: the political apparatus of state and the macro economy. Absolute space, thus, physically supports production activities and the existence of a state apparatus. Its property is somewhat similar to the motto of the French revolution: *liberté, égalité, fraternité*. True to this motto, the properties of freedom and egalitarianism embodied in pristine absolute space generate unlimited connectivity, which has a physical potential to empower the subordinated people.

However, the connectivity in contagious space would eventually create convergence and equilibrium among the

members, agencies, or economic variables across space. This equalizing nature of absolute space can disturb existing social relations. The property, thus, emerges in contradiction with a society with the integrity of a social group or a market agency that strives to make itself more equal than others and that does not want the wealth to transfer to those who suffer from an icy economic ambience.

If people are free to move across the absolute space, society may collapse if only because the subordinated will leave society spatially to break fresh ground elsewhere and obtain the status of independent and wealthier persons. In ancient Japan, for example, when the Asiatic mode of production was prevalent, the emperor's government (朝廷) forced the "public men" (公民, serfs) to work in rice cultivation. The "public men" were confined to the "public land" (公地, paddy fields and the irrigation systems built by the emperor's government) configured in a grid-like rectangular spatial pattern. The serfs, not satisfied with their labour and life conditions, acted on their own to escape from the "public land," or the territory under the domination of the emperor, and moved across relative space to another territory that was the private estates of large temples. Serfdom under the Asiatic mode of production was thereby brought to its collapse.

The dominant power, therefore, needs to annihilate the free and egalitarian nature of pristine absolute space. This is *bounding* (有界化) or the act of delineating a boundary around a

piece of the unlimited expanse of pristine absolute space—the process of the real subsumption of absolute space. The vertical social relationship is thus clearly etched in space.

Through bounding, the dominant power is now able to exercise exclusive control over a piece of absolute space. By setting up artificial boundaries across the pristine space, the dominant power gets a spatially exclusive container: *territory*. The dominant power thereby transcends the contradiction between the physical nature of space and vertical power relation. Territory thus becomes a spatial piece in which power can exercise exclusive domination.

A state provides the most representative case. Giddens stated that “[a] nation-state is ... a bordered power container” (Giddens 1987, 120), within which a sovereign, or one who holds power, exercises exclusive political domination.

b) *Institutionalization of a Bounded Territory*

However, merely indicating the delineation of boundary on a map does not put an end to the act of bounding. The boundary must be physically reinforced with demarcation stones, fences, or a concrete wall, as we saw in Berlin during the Cold War, so that it is never trespassed on. The boundary is then made more effective by placing it under surveillance to spot trespassers.

Putting up physical barriers and surveillance alone may still not be sufficient to prevent the people contained in a territory

from penetrating the boundaries. The boundary needs to be institutionalized through the deployment of a state apparatus or other legally or physically coercive means. The state enacts laws to make the people respect the boundary thus created, and those trespassing into the territory that they are not supposed to enter are sanctioned with a charge of trespassing. They will most likely be arrested and tried by a court. In the ultimate case, the action of trespassing or territorial disputes may result in war or physical violence exercised by a state authority.

A boundary can be erected by means of an international treaty among the states sharing the boundary, and legal control thereof can be exercised mutually or unilaterally by the states concerned. Physical barriers and legal measures to protect territories combine, and each territory as well as an aggregate of territories is thus produced as the “iron frame” grid into which subordinated people are confined and forced to remain to work and conduct most other functions of human existence.

Another important case of institutionalized territory at the lower spatial scale is that of landed property. It is also exclusive because privately owned land plots are circumscribed within fixed boundaries in relation to the neighbouring plots, and any person not authorized by the owner is prohibited entry; otherwise, s/he may be prosecuted as a trespasser. The way of institutionalization is different, however. The power of the private land owners to fend off trespassers comes from the

power—dominant over the higher spatial scale—of the state. The state enacts legislation to protect private landed property, sets up a land registry, operates a police force that arrests unauthorized trespassers and institutes legal procedures to penalize those who break the laws. Some land plots are thereby made exclusive to the rich or the ruling financial capitalist class. The rich create urban segregation, which sometimes leads to the erection of a physical barrier circumscribing their plots, creating a “gated community.” Following the class nature of society, the mosaic of land plots also inevitably assumes a class nature. The “iron frame” grid is thus created at this spatial scale, albeit with the help of power at a higher spatial scale. Individual land owners are exceptions in some countries such as the United States where it is considered legal for landowners themselves to fend off trespassers with physical force and defend the exclusiveness of their territory.

After all, in most socio-spatial processes, it is the state power that substantiates the effectiveness of boundary and thus institutionalizes the “iron frame” of *les représentations de l'espace*, confining the people within territories that the authority allows.

c) *Porosity of Boundaries Controlled by the Dominant Power*

Social and economic relations contained in territory cannot be confined within the prescribed “iron frame” because they need

interaction across the boundary with other social groups or individuals. The territory, therefore, must have porosity, over which the dominant state apparatus maintains control.

A boundary line is shared by two sides, each of which is controlled by different powers. In some cases, they come to peaceful agreement for a treaty to mutually control the porosity; in other cases, the control is carried out unilaterally. The latter especially applies to a high-income state, which fends off the flow of labour migration generated spontaneously by the rational behaviour of labour to maximize its income in order to protect jobs and to save social costs that inevitably incur when numerous migrants flow in. This is the manipulation of the *porosity of boundary* by those dominating over the territory. In order to engage in foreign diplomacy, international trade, deployment of foreign labourers, and tourism, for example, a state must allow some degree of porosity of the boundary under its control.

The porosity is often selective and controlled: the dominant power allows anyone beneficial to sustaining and promoting the domination to pass through the boundary but denies anyone who is considered detrimental to it. To control the porosity, the state enacts various immigration and trade legislations and establishes immigration and customs control posts on the border so that the persons or goods which the dominant power considers undesirable are denied entry or departure.

The spontaneous and free spatial action of humans and goods is thereby severely restrained. The actions endorsed by the inherent freedom and equality embedded in the pristine absolute space is thereby negated by the dominant power.

d) *Class Struggle over Exclusiveness of Territory and Gesamteigentum*

Some economically and/or socially subordinated people struggle against this “iron grid” of the bounded territories created by the dominant social class or group. They challenge the legal systems of international boundaries or private landed property, desiring to create their own spatial configuration that would maximize their economic or social benefits.

The most recent case in this rebellion against exclusive territory (*Wirkungsraum*) at the scale of landed property is the “Occupy” movement in New York. As Hou (2010, 3) noted, “official public space has long been exclusionary” and “public space has also been an expression of power.” Those having been placed in a disadvantaged position in neoliberalist structural adjustments claim they are “the 99%” and are occupying the “public” space that is in fact exclusionary and embodying power. This movement has spread across the world’s major financial centres. In East Asia, the ground floor of the Hong Kong headquarters of HSBC, a global financial multinational, was occupied for ten months until September 2012. This movement has much stronger spatial connotations than those of the

previous ones as it attempts to negate the exclusiveness of a territory dominated by the financial capital, the ruling class in the neoliberalist regime.

Another example in a developing country is *O Movimento dos Trabalhadores Sem Terra* in Brazil. This movement encourages the poor and landless peasants to occupy a small plot of a large farming estate owned by a farmer, a landlord, or the state to claim *de facto* right to cultivate the piece to earn their living.

Here, the exclusiveness in commanding a portion of space becomes a terrain of struggle between those dominating and being dominated. Those confined within the “iron frame” and the economically disadvantaged attempt to penetrate the established boundary in order to command a wider expanse of space and assert themselves. They advocate that piecemeal private ownership of land by those in different social class positions should be abolished and the entire expanse of space should be under *Gesamteigentum* (總有) or be turned into a common that everyone could use on more egalitarian terms. Those disadvantaged struggle unconsciously for the realization of the ideal embedded in the pristine absolute space.

Gesamteigentum is also a precondition for action space. Actions such as commuting and shopping need a path to be shared commonly by an indefinite number of participants in the action space. Most outdoor activities, trekking for example, cannot be carried out without the spatial concept of commons,

since trails are often merely spontaneously created traces of footprints.

The concept of *Gesamteigentum* thus inevitably becomes a contested terrain between those in support of market fundamentalism based solely on private property and those in support of symbiotic community constructed on commonness in use of space. The former, in drawing upon the famous “tragedy of the commons” (Hardin 1968), claim that bounding into pieces of privately owned land is the only ultimate solution to the risk of resource degradation and depletion, whereas the latter assert that commons, managed carefully by communal hands, are indeed sustainable and an essential precondition for a more egalitarian society.

The “tragedy of the commons” debate suggests that a contentious socio-spatial struggle exists around the question of legitimacy of the exclusive bounding and concomitant alienation of the originally egalitarian pristine absolute space. This struggle over bounded and institutionalized territory thus leads to another intriguing spatial struggle manifested in space: the contradiction between *Wirkungsraum* and *Aktionsraum*.

4. Contradiction Between Institutionalized *Wirkungsraum* and Anarchical *Aktionsraum*

As suggested in the previous section, territories created out of

the real subsumption of absolute space fall into either of two types, embedding quite different properties, which contradict one another (Table 1).

a) *Contradicting Properties of the Two Different Types of Territoriality*

The first of these types, *Wirkungsraum* comes from the discussion on labour process in *Capital*. Marx stated that the labour process needed to occupy a territory exclusively for sites of manufacturing plants or farmlands. Marx called these exclusive spatial bases on which the labour process occurs *Wirkungsraum* (field of employment; Marx [1867] 1977a, 287). The connotation of this term could be expanded to a generic term for exclusively bounded territoriality in general.

The second of these types is *Aktionsraum* or action space. This term originates in German social geography (Ruppert, Maier, and Paesler 1993). Actions and socio-economic activities of humans and movements of physical phenomena extend across absolute space, manifesting propensity towards spatial egalitarianism. Meanwhile, the limit of social space is delineated not by acts of those in domination but by physical distance, which is a pristine relative space before the process of subsumption occurs. The physical distance spontaneously generates a distance or a decay effect of the actions in which the intensity of social or market interaction in the social space diminishes in inverse proportion to distance.

Aktionsraum is typically nodal in its configuration, created by the repeated mobility of agencies, activities, or phenomena radiating from the core across the absolute expanse of space towards the periphery, as in the case of commuting or emitting of pollutants. Physical distance, the property of pristine relative space, and spontaneous mobility play crucial roles in the production of territory. It is therefore a type of social space not controlled much by the dominant power but more anarchical, fluid, and *laissez-faire*: the properties more amenable to pristine absolute space allowing spatial liberty and egalitarianism.

Another property of *Aktionsraum* is that no agent or group occupies a piece of space exclusively. Different agents or activities can share a territory, and more than one action space can overlap against one another. The *Aktionsraum* presupposes the right of way available to the general public, or *Gesamteigentum* of space not occupied exclusively by any particular group or individual.

The movements of the agents or physical substances in each *Aktionsraum* have a unique spatial range depending on the nature of the substance and trips, as assumed in central-place theory, where the spatial ranges of goods are determined by the order of goods, with higher-order goods commanding wider action space than lower-order goods. The physical extent of a range is rather flexible and can change for various reasons including improvements in the means of transportation, growth

or decline of the local economy, fluctuation of land prices in the city centre, and changes in perceptions of physical distance among the agents concerned.

Aktionsraum, however, occurs for a much larger number of causes: selling labour power every day to the job location, commuting to schools, migration either permanently or temporarily, commodity trade including contraband, activities of multinational corporations engaged in production or finance, military deployment, tourist activities, and the area within which families are customarily related by marriage. Actions of non-human origin such as the movement of pollutants or of animals and plant seeds in an ecosystem also form *Aktionsraum* (Mizuoka 2008).

Action space (<i>Aktionsraum</i>)	<i>Wirkungsraum</i>
More anarchical, fluid, and laissez-faire.	More institutionalized, controlled, and constrained.
Boundary is set by physical “distance - decay effect,” where interaction over space diminishes as the inverse square of the distance.	Boundary is set by political processes including physical battle and subsequent peace negotiation or explicit economic transaction of landed properties.
Created by repeated spatial mobility.	Created by the explicit process of bounding.
Different agents share a territory, and more than one action space can overlap against another.	Exclusive occupation by a social group or economic agency.
Presupposes <i>Gesamteigentum</i> , which lacks the concept of “trespassing.”	Presupposes private ownership of a territory and trespassing is subject to prosecution.
Emerging out of free, flexible, and spontaneous human actions, not controlled by the dominant power.	Once created, the boundary forms an “iron frame” where free human actions are negated or constrained.
Nodal in configuration.	Homogenous in configuration.
<i>Empowerment and freedom</i>	<i>Domination and constraint.</i>

Table 1. The contradictory properties of *Aktionsraum* and *Wirkungsraum*

b) *Social Struggle and Aktionsraum*

As discussed above, *Aktionsräume* is less institutionalized but more spontaneous whereas *Wirkungsräume*, or a bounded territory, is more institutionalized and fixed. Various *Aktionsräume* come together in different types of spatial scales. The scale of metropolitan areas is formed by such factors as daily commuting and shopping ranges, range of longer-term labour migration, and the habitat of an ethnic group or groups of people using a common language. So are the *Wirkungsräume*, forming scales consisting of such mosaics as of state, land use, and local jurisdictions.

Among these scales emerge many vertical inter-scalar relations. Some scales are almost totally dependent upon higher-order ones, as in the relationship between the state and the jurisdictions of local states; yet others are more independent and contradictory in relation to other scales. The most typical struggles come out of the contradiction between anarchical *Aktionsraum* and institutionalized *Wirkungsraum*. A bounded territory institutionalized by the dominant power is always exposed to fresh challenges from the actions embedded in the more pristine property of absolute space. People act beyond the spatial range of institutionalized boundaries, either out of ignorance or explicit intention. Action space can therefore erode and undermine the domination of power exercised in the bounded territory.

The more anarchical and spontaneous nature of *Aktionsraum* means empowerment or the power to challenge the dominant authority represented in the institutionalized *Wirkungsraum*. While those in power attempt to impede the freer action of agency or socio-economic flows by controlling the porosity of the territorial “iron frame” grid, the subordinated people may attempt to continue their actions by breaking through this frame and penetrating the boundary, often without authorization. The exclusiveness and boundedness of the territory and the authority upon it are thereby undermined. This process is more problematic to the authority because it can lead to the collapse of the dominant power contained in the institutionalized territory itself.

The subordinated class, ethnic group, or individual can intentionally deploy the contradiction between *Wirkungsraum* and *Aktionsraum* to create *les espaces de representation* for its struggle against the authority. The struggling agent may form a united front based on the common nature in spatialized oppression, such as a minority position in terms of ethnicity, to engage in collective actions while in other cases be more individual and disintegrated, such as the agencies in the market acting rationally to maximize their income. Ironically, many of these individual cases come out of the rational economic behaviour of agents, which a market fundamentalist would highly praise. They are such spaces as of illegal immigration

seeking higher incomes or contraband trade for higher prices, which are considered punishable by law enforced by the dominant power, including that of a neoliberalist type. Such free mobility counters the power of the authorities that place undue burden on the free mobility of people or goods based on the *laissez-faire* behaviour of rational economic agents. A typical case relating to immigration is the flow of Chinese labour in pursuit of higher income from the People's Republic of China to Hong Kong without authorization from the British colonial authority in the 1970s. An example relating to contraband is the cross-border import of daily necessities from Thailand to Burma, where goods for daily consumption are in short supply.

These actions alter the configuration of the institutionalized territory placed under the action of creating *Aktionsraum*. The proliferation of these *Aktionsräume* would eventually undermine the institutionalized territories, and the very authority that has survived by deploying the "iron frame" as its container would collapse.

This socio-spatial struggle is clearly demonstrated in the "Pan-European Picnic" on the Hungarian border in 1989. The pressure generated by thousands of East Germans gathering spontaneously led to the opening up of the border fence with Austria. This allowed East Germans to flee from the institutionalized wall that had confined them into the "iron frame" and had split their potential action space. The collapse of

the Stalinist regime of the German Democratic Republic right after this “picnic” also demonstrates clearly the counter-action from produced space to society.

5. Subsumption of Relative Space, Networks, and Social Struggle

a) Subsumption of Relative Space and Production of Networks

The relative attribute of the pristine space has contrasting properties to those of the absolute space: individualizing unique spatial points and distancing between them. These properties are more amenable to such concepts as differentiation, isolation, and sometimes discrimination in society.

Society or economy is substantiated and works properly only when every member of the society or the economy is interconnected through communication and transactions. Once subsumed formally into society, the relative space also functions both positively and negatively in relation to society.

Positively, the relative space provides society with the spatial designator for the interaction of people and economic transactions. Persons cannot conduct social or economic interactions without determining a unique spatial point.

Negatively, however, another property of the relative space, distance, stands in the way of such interaction. The distance-decay effect sets limits to the spatial expanse of social

and economic activities, making interaction difficult. Hindered by distance, agencies are fragmented and isolated from one another and the society or economy is pushed to the verge of collapse.

It is therefore imperative for a society to annihilate distance, a property of the pristine relative space, through the deployment of technology and funds. This negative effect has to be negated by the society with produced space, or physical means of transportation and communication, that weakens the distance-decay effects. This is the process of *spatial integration* (空間統合) or real subsumption of the relative space.

Unlike bounding, which is substantiated through the coercive power of the state apparatus, spatial integration involves the production of physical transport or communication lines and their subsequent maintenance. For relative space, production of the “iron frame” is accomplished with heavy public investment or private investment approved by the authority. Although the real subsumption of absolute space also needs such physical installations as demarcation stones, fences, or border posts, the institutionalization of the relative space takes far heavier physical investment on the built environment.

However, the connection of a mere two points by means of transportation and communication is not sufficient since the points that need to be connected are scattered across the territory, which is a two-dimensional surface. It, therefore, needs

to be annihilated with a set of many one-dimensional lines connecting various points. Thus, the means of transportation and communication must be produced as a *network*.

There is an inherent “paradox of spatial integration” with networks consisting of lines and nodes. More efficient means of transportation travelling at higher speed or carrying larger volumes cost more per kilometre to build and operate. Therefore, such networks are inevitably sparser than the conventional ones, aggravating spatial unevenness and generating a spatial configuration of the “hub-and-spoke” type. This makes the recovery of the isotropic and homogenous property of the absolute space all the more difficult.

Although the annihilation of distance itself is essentially class-neutral, the class nature is clearly etched into the spatial configuration of a network. The dominant power usually plans its centre to be situated at a node of higher order. To facilitate domination, the ruling power creates a hierarchical spatial system consisting of the highest-order core, secondary nodal points, and a more marginalized periphery. These points are connected with a transportation and communication network built through public investment by the ruling class. The pattern of the network is planned and produced to facilitate political rule, capital accumulation, and deployment of military power. It is a typical *représentation de l'espace*, where the vertical social and power structures are thus clearly embedded and which the

subordinated people must follow.

The nationwide spines of railways and highways, with the centre of administration occupying the most important node of the network, thus emerge. In colonies, the network is configured in the interest of the colonial ruler in order typically to connect the peripheral areas with the major port that connects the colonial economy with the suzerain. It is not built to meet the interests of the indigenous people. The grass-root needs of the indigenous people for spatial mobility and communication across a more homogenous configuration of space are not duly considered. The spatial mobility of people is thus canalized to the configuration that the dominant power produces. The growth of an urban system also tends to follow this spatial spine, while indigenous or traditional urban systems are often neglected, especially in colonies.

b) *Class Struggle over Network Configurations*

Faced with this spatial domination through spatial networks, the subordinated people seek to produce their own network of spatial integration and attempt to undermine the dominating social structure.

To begin with, the subordinated people demand a network of public transportation that is dense and homogenous, with comfortable, relatively low cost and frequent services to satisfy their daily needs of commuting, shopping, and leisure.

This desire and need for more homogenous *Aktionsraum* was fulfilled to a certain extent during the Fordist era, yet it became a contested terrain under the regime of neoliberalism. To achieve a network of this nature, they demanded the adoption of principles of universal service and cross subsidy. This spatial struggle is therefore homologous between those in support and critical of neoliberalism.

The subordinated people may need an alternative network of spatial integration that covers a longer spatial range. In this case, those struggling against the authority may need to set out to build their own transport network to materialize their own objectives. With this move to build an alternative transport network, the subordinated people can now materialize their own *Aktionsraum*.

An example for this alternative transport network is the “underground train” that functioned in the Civil War era in the United States. It transported black slaves from the Southern farming states to the industrial North, where the slaves were “liberated” and converted into labour power for manufacturing plants run by northern capitalists. Another example is the Ho Chi Minh trail, connecting the People’s Republic of China, North Vietnam, Laos, and Cambodia with South Vietnam to transport ammunitions and other military supplies for the National Liberation Front in South Vietnam, then dominated by a United States puppet regime. Some parts of the Ho Chi Minh trail could

accommodate military trucks, and there was a sophisticated network connecting North Vietnam with various “liberated zones” in the South. With this network of “trails,” the North Vietnamese managed to achieve victory in the Vietnam War.

In comparison to the institutionalized means to integrate space, alternative transport networks such as these are often shabbily built since the subordinated do not have sufficient funds to construct a durable transport infrastructure. Nevertheless, they are indispensable for the subordinated people in undermining the dominant power.

6. “Stray Space” and Spatial Struggle

Due to the “paradox of spatial integration,” some parts of a territory are inevitably left out from the network of spatial integration. The higher the speed at which transport technology is designed to move humans and goods is, the more severe the spatial unevenness of the network becomes. This aggravating unevenness also means differences in the intensity of domination by the power across a bounded territory: the core area can be firmly under authority, while domination in the periphery may be weaker. Even though the dominant power attempts to extend its hold to every corner of the territory, the level of funds required to make the network denser to accomplish successful surveillance over an entire territory may

be prohibitive.

Due to this imperfect achievement in spatial integration, some parts of the territory always remain weakly or not at all subsumed under the power of the authority. This allows the social groups struggling against the dominant power to act relatively freely without much control or surveillance by the authority. The parts of territory left out of real subsumption, thus, remain imperfectly controlled by the dominant power and can be termed “*stray space*.”

a) *Stray Space and Spatial Struggle*

In the past, when the technology to achieve surveillance over space was more primitive, “stray space” was a feature common to many countries. In Manchukuo, for example, the central government in Hsinking could never achieve perfect domination over the peripheral mountainous areas under its authority. The areas along the Soviet border were typically subject to infiltration by partisans engaged in the anti-Japanese struggle.

Since “stray space” is out of bounds of the “iron frame” of the institutionalized territory, the subordinated social groups can escape the domination by the power and deploy intentionally the stray space to develop secretly the alternative nodal base for their struggle. It can take the form of a hidden “liberated zone,” which serves as a launching pad to engage in national or global insurgency against the authority. In this sense, stray space

serves an important element in producing *les espaces de représentation*. The effectiveness of such a nodal base for the struggle depends on the strength of the spatial grip by the authority as well as the skill of the subordinated groups to hide such a base from the authority's surveillance.

Examples of such nodal bases could be found in the remote mountainous areas in Malaysia and Thailand until the 1960s. Inspired by the Chinese revolution and the strategy of Mao Zedong, the communist rebels established centres of struggle in the northern border areas, aiming to launch communist revolution in these countries.

b) *Counter-Struggle to Relinquish Stray Space*

The dominant power always attempts to have a firm grip over the entire expanse of its territory. It, therefore, strives hard to detect and attempts to relinquish any stray space or its mere possibility by developing more powerful means to achieve surveillance and control the possible stray space more effectively.

The dominant power thus sets up a "security camera" at every corner of the city street, asks those entering wilderness areas to obtain permits or to register beforehand with the authority and deploys special operations forces on permanent standby to put down any attempt by the dissidents to transform a stray space into an alternative centre for insurgency. Recently, advanced

information and space technologies have contributed greatly to relinquishing stray space further. Satellites have been launched to take high-resolution aerial photos from outer space to detect any suspicious activities in the stray spaces. An IC-equipped fare card for public transportation, developed as FeliCa by Sony, was first used in Hong Kong as the Octopus Card (八達通) and later proliferated to other cities worldwide (as Suica in Tokyo) to continuously collect data on the action paths of any person. The data are stored in the database of the IC fare card company and are ready to be deployed by the authorities who wish to keep track of anyone's spatial actions. The dominant power has thereby equipped itself with enhanced capacity to check and obliterate possibilities for a stray space.

Newton's alchemist assumption of absolute space being the ubiquitous sensorium of God has now turned into reality. The "iron frame" of space becomes ever more tightly controlled and structured, while the subordinated people become more powerless in creating these "alternative" territories in secrecy.

Today, the possibility of establishing such a "liberated zone" exists only in countries where the government is defunct and surveillance and control over national territory is dysfunctional. A good example is Somalia in the Horn of Africa. For insurgent groups, it is a valuable space which offers a rare global stray space to establish their alternative centres to wage counterattacks on the globally dominant neoliberalist power. This is the very

reason that the neoconservatists have labelled such countries “failed states” (Wolf 2001) and have attempted to place them under political domination akin to colonial rule, as in the case of Afghanistan.

c) *Deployment of Stray Space by Financial Power*

Interestingly enough, the stray space is also deployed by a financial capital, which holds ultimate power under the neoliberal regime. Financial capital can escape from formal financial regulation exercised at the established financial core by transferring capital to “outside the regulatory reach of national jurisdiction” or tax havens (Dicken 2011, 396) to enjoy lax or little taxation and control over financial operations.

These tax havens are typically hidden in the periphery of global capitalism in terms of geography, off the beaten track of major financial nodes; yet they often remain under the sovereignty of the financially powerful core countries. A typical example is the Cayman Islands in the Caribbean, which the United Kingdom still maintains as its colony. The strength of the City of London as the real global financial centre rests partly on the existence of financial consultants who are knowledgeable enough to advise their clients to take advantage of the loopholes in financial regulation present there.

The formal part of financial economy repeatedly claims, at least for appearance’s sake, the need to put the tax havens

under more stringent control. Yet, the crackdown on these financial stray spaces has rarely been conducted. The dominant “global society” has never labelled such a stray space as “failed,” placing it under surveillance and relinquishment. The tax havens are indeed an integral part of the neoliberalist financial economy, forming part and parcel of the dominant *représentation de l'espace*. Both types of stray space are produced purposefully in the periphery, yet only that emerging through the initiative of the subordinated is subject to serious threat of extinction. The class nature of the stray space is evident here.

7. Central-place System: The Ultimate “Iron Frame” of Territorial Integration

a) *Dominant Power Embedded in the Multiscalar Spatial Configuration*

The dominant power wants to place every corner of its territory under its effective domination. As discussed, the task here is twofold: to hold control over more anarchical *Aktionsraum* and undermine attempts to establish hidden alternative centres in the stray space. The “central-place system” is the ultimate spatial model that accomplishes these tasks, at least ideally.

There are many *Aktionsräume* with varied spatial ranges associated with an array of social and economic activities. They overlap and pile up to form the strata of an ensemble of anarchical territories. One of the tasks in producing this

représentation de l'espace is to give demarcated spatial boundaries to these *Aktionsräume* so that an order compatible with the social relations of the dominating power is established. The power must, therefore, vertically coordinate the entire territorial ensemble with a number of *Aktionsräume* into a single coordinated spatial system. This is the socio-spatial process known as *territorial integration*. The territorial integration forms part of the real subsumption of the relational space, where the relations between absolute and relative attributes of space as well as between pristine and produced spaces are involved (Mizuoka 2002, 2008).

A model for the ultimate solution of territorial integration was given by Christaller (1968) in his seminal book on the central-place system. In this model, all *Aktionräume*, assumed to represent activities of buying goods, with a variety of spatial ranges are fitted within the vertically overlapping layers of clearly demarcated hexagonal territories called *Ergänzungsgebiet* (complementary region), with a hierarchically formed place at the centre of each region. Each economic agency spreading uniformly across the entire territory is assumed to visit only a single set of central places, which is the closest to the place where the agency lives. Owing to the rational preference of the individual agencies to minimize the distance to move in order to engage in activities offered in the central places, the *Aktionräume* have now been deprived of their anarchical nature

altogether and placed fully under the authority of the dominating power in a neatly overlapping hierarchy of hexagons of various spatial scales. The landscape rigidly configured in this integrated territory leaves no extra room for stray space.

Building and managing the produced *représentation de l'espace* as rigid and impeccable as the central-place system are important tasks for the authority in order to control the ensemble of variegated spatial scales under its dominating power. The dominating power thus plans and constructs a nodal network of hierarchically nested central places and complementary territories surrounding each of them under the name of national land planning (*Raumordnung*). The rigidly structured system of central places implies that agencies are supposed to visit only the designated centres and not to “trespass” to the neighbouring complementary regions. Each activity is assigned with different spatial ranges, which each agent is not supposed to alter. This presupposition results in the spatial mobility of each agent being confined into the “iron frame” of the integrated territory by the dominating power.

A central-place system is therefore not a value-free spatial product; social relations and domination are tacitly yet deeply embedded in it. This socio-political embeddedness is clear if only because the construction of the central-place system in reality involves massive public investment for urban infrastructural provision.

b) *Central-Place Systems in Class Struggle and Colonialism*

The corollary to the tenet that a political and social relationship is firmly embedded in the configuration of a hierarchical central-place system is that the patterns of the spatial hierarchy should considerably differ from one class or ethnic group to another. The central-place system is thus ethnic- or class-specific.

An example is the configurations of a colonial space. The colonizing country typically superimposed its own system of central places on the indigenous central-place system that had existed before colonization without much regard for the latter. The colonial power normally placed its highest-order centre at the port city, where the colonial economy and politics were directly linked to the suzerain capital by ocean transportation and telegraph. This port city could also serve as the seat of colonial administration, as in the cases of Rangoon and Calcutta. Once such central-place system was superimposed and gradually etched firmly into the colonial terrain, it eventually turned into the main spatial spine of the colonized territory. Even after independence, most colonial central-place systems are inevitably adopted by the newly independent government and continued to be used as the spine of the now-independent national territory.

In rural colonial Korea, for example, Japan built its own new administrative centres in the vicinity of traditional centres

inherited from the Joseon dynasty. In Gyeongsangbuk-do on the East Sea/Sea of Japan coast of the Korean Peninsula, Pohang was built as a colonial administrative centre next to traditional Heunghae. Similarly, in Ulleung Island, Japan built Dodong to replace the traditional local centre of Daeha. These built environments regulated the spatial configuration even after independence. The Republic of Korea took over Pohang and Dodong as its own central places and has continued to use them and develop them into local economic and administrative centres. Recently, however, the Korean government has planned a new KTX station near Heunghae rather than Pohang, which can lead to the resurrection of the traditional centre. In former Manchuria, on the other hand, the village-scale central-place system built haphazardly by Japanese settlers was largely abandoned and the traditional system re-emerged after the collapse of Manchukuo.

As in case of the subsumption of absolute and relative spaces, the systems of central place constitute an indispensable tool of struggle. Opposing the central-place system built as *représentation de l'espace*, the subordinated people may attempt to build an “alternative” central-place system for emancipation in secrecy, with the centre built in a stray space as the highest order in the hierarchy.

The system of central places as *espaces de représentation* can

work to subvert the power of the dominating authority that a built network imposes. It is difficult for the subordinated to build a dense and solid network that covers the entire national territory in the way that the network built by the dominating power does, if only because of the huge costs involved and the constant surveillance that the dominant power exercises. Nevertheless, a locality in a peripheral area in the institutionalized system of a central place can become a higher-order centre in an alternative system if it is in a stray space and gets a higher-order commanding function for social struggle. An alternative central-place system hidden from its dominant and institutionalized counterpart, be it simpler than the dominating one, is an indispensable spatial tool in subverting the dominant political system successfully. For example, during its struggle against the Kuomintang and invading Japanese troops, the Communist Party of China organized a variety of hierarchical spatial systems in its “liberated zones.” In his pursuit of spaces of utopia, Harvey characterized such an alternative spatial hierarchy under the names of *hearth* (the basic unit of habitation), *edilia* (neighbourhood), *regiona* (a bioregion striving to be self-sufficient), and *nationa* (a federation for mutual barter and trade) (Harvey 2000, 263).

8. Scale Jumping: Command of the Higher-order Spatial Scale as a Means of Struggle

The subordinated individuals or groups are in no way obliged to respect and be confined within the assumed range of their *Aktionsraum* in the central-place system. In order to be empowered, they may opt to expand their spatial range of action beyond the limit of the parochial locality to reach a higher-order spatial scale. This will open up a fresh, often more empowering spatial base for struggle.

This spatial strategy is called scale *jumping* (Glassman 2002). Scale jumping is the action of those oppressed or placed in subordinated positions, having been confined at lower spatial scales to expand the spatial range of their struggle. It has an effect of switching the spatial scale of action to a higher one so that they are empowered more effectively and have a better chance of accomplishing their political or social objectives.

Scale jumping has elements of the contradiction between *Wirkungsraum* and *Aktionsraum*. Contrary to the socio-spatial processes discussed in the previous sections, the production of the *espaces de représentation* is not necessary here. Those in subordinated positions somehow manage to expand their spatial ranges and jump out of the existing scale at lower orders into a higher spatial scale to increase their influence and make their voices heard to a wider audience. As evidenced in the Zapatista movement, the deployment of cyberspace plays a crucial role

here. Movements at the provincial scale in the rural state of Chiapas in Mexico exerted global influence and gained support from distant places through the Internet, the *Aktionsraum* of which was essentially global. The scale jumping entails emancipation because it involves the expansion of the *Aktionsraum* of struggle beyond the institutionalized boundary of the territory where the dominant ones exercise power to oppress the subordinated people. A state authority cannot exercise that power beyond its institutionalized boundary, while the subordinated commands a wider *Aktionsraum* at a higher spatial scale for their struggle.

Local citizens who suffer from environmental pollution caused by a multinational corporation-owned plant remain powerless as long as they struggle against the multinational only at the scale of their own political jurisdictions. Even if they succeed in their struggle for stricter environmental regulations, the multinational corporation may simply resort to a “spatial fix” of moving its plant elsewhere in order to evade the stricter restrictions. In this case, those citizens need to gain a spatial scale that matches with the *Aktionsraum* of a multinational corporation. They need to jump the scale, sometimes skipping the national scale, to appeal, for example, to an alternative non-governmental organization with global reach, such as Greenpeace, and persuade it to mobilize its power against the global action of the multinational corporation. When the multinational corporation

can no longer resort to the “spatial fix” that is switching territories on the same spatial scale to evade the struggle of the local citizens, the local citizens will achieve victory.

In the final analysis, as Harvey (1985) puts forward, those who command a higher spatial scale have a higher prospect of winning in the struggle.

9. Conclusion: Production of Localities Through Spatial Struggle

Configuration of space is the product of the socio-spatial process of subsumption of space. Space is produced with transcendence on the contradiction of the formal subsumption of pristine space. The process is formally implemented, managed, or put under surveillance by the authority with power that institutionalizes the configuration that it created. Yet, this process can also be implemented in parallel by different classes and ethnic groups. The process of space subsumption and production of space into society is thus always class and ethnic specific. For this reason, space is a very important element in social struggle. Both pristine and produced spaces are deployed as “weapons” by the subordinated group to fight against authority.

Placed and contextualized in the dialectical contradictions between *Wirkungsraum* and *Aktionsraum*, the institutionalized

and alternative configurations of space and ultimately the *représentation de l'espace* and *les espaces de représentation*, a spatial point and a property of relative space, inevitably embrace in themselves a unique socio-spatial property. This is called a place or *locality*.

The task of critical geographers should be to analyze and propagate this positive potential of space to be deployed for the empowerment of people and for successful social struggle in general as well as at a particular locality. Geography indeed matters for our better society and economy to win.

References

- Christaller, W. [1933] (1968). *Die zentralen Orte in Süddeutschland*. Darmstadt, Wissenschaftliche Buchgesellschaft.
- Dicken, P. (2011). *Global shift*. 6th ed. Los Angeles: Sage.
- Giddens, A. (1987). *The nation-state and violence*. Vol. 2 of *A contemporary critique of historical materialism*. Berkeley: University of California Press.
- Glassman, J. (2002). 'From Seattle (and Ubon) to Bangkok: The scales of resistance to corporate globalization'. *Environment and Planning D: Society and Space* 20 (5): 513 - 533.
- Hardin, G. (1968). 'The tragedy of the commons'. *Science* 162 (3859): 1243 - 1248.
- Harvey, D. (1969). *Explanation of Geography*. London: Edward Arnold.
- _____ (1985). *Urbanization of capital*. Oxford: Blackwell.
- _____ (2000). *Spaces of hope*. Edinburgh: Edinburgh University Press.

- Hou, J. (2010). *Insurgent Public Space: Guerrilla Urbanism and the Remaking of Contemporary Cities*. New York: Routledge.
- Jammer, M [1954] (2012). *Concepts of Space: The History of Theories of Space in Physics*. Mineola: Dover Publications.
- Lefebvre, H. [1974] (1991). *Production of space*. Translated by Donald Nicholson-Smith. Oxford: Blackwell.
- Marx, K. [1867] (1977a). *Capital*. Vol. 1. New York: Vintage.
- _____ [1867] (1977b). 'Results of the immediate process of production'. In *Capital*. Vol. 1, edited and translated by Rodney Livingstone, 948 - 1084. New York: Vintage.
- Massey, D. (2005). *For space*. Los Angeles: Sage.
- Mizuoka, F., ed. (2002). *Keizai-Shakai no Chirigaku*. Tokyo: Yuhikaku.
- _____ (2008). 'Subsumption of space into society and alternative spatial strategy'. *Geographische Revue* 10 (2): 7 - 19.
- Pile, S. and M. Keith, eds. (1997). *Geographies of resistance*. London: Routledge.
- Ruppert, K., J. Maier and R. Paesler. (1993). *Sozialgeographie*. Braunschweig: Westermann.
- Soja, E. (1980). 'Socio-spatial dialectic'. *Annals of the Association of American Geographers* 70 (2): 207 - 225.
- Wolf, M. (2001). 'The Need for a New Imperialism'. *Financial Times* 10 October 2001.