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A change engaging resilience: Home gardening, food sharing and everyday resistance

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Abstract: Resilience and food self-provisioning (FSP), terms that until recently were deployed primarily in the study of livelihoods in the Global South, are now attracting attention from alternative food scholarship in the Global North. Drawing on a large-scale survey conducted in the Czech Republic, this paper investigates FSP as a social resilience-enhancing set of practices. In addition to the traditional reading of FSP as a passive, defensive, crisis-deflecting form of resilience, this paper puts forward an alternative conceptualization of resilience as a proactive, preventative, future-oriented and transformation-enabling capacity that runs counter to the tenets of neoliberalism.

Keywords: resilience; sharing; food self-provisioning; alternative food networks; food entitlements

Introduction

In the last several years two terms that until recently had been deployed primarily in food studies conducted in the context of the Global South have gained growing prominence and confluence in studies of alternative food systems in the Global North. The terms are “resilience” and “home gardening” (also referred to as “home-grown food”, “home/household food production”, and “food self-provisioning” [FSP], which is the term used in this paper). Originating in the physical and natural sciences, there has recently been a “social turn” for resilience (Brown 2014, Pink and Lewis 2014). Drawing on findings from a recent research project into household food production and sharing carried out in the Czech Republic, this paper engages with both terms and suggests alternative readings to those usually deployed.

Traditionally, FSP has been understood as a coping strategy and a response to austerity, need, and hardship. In the social sciences resilience is usually conceptualised as the ability to adapt to and recover from a crisis or disturbance.¹ Recognising that ‘there is nothing inherently negative or positive about resilience’ (DeVerteuil and Golubchikov 2016, 144), this paper argues for extending the understanding of FSP in the North beyond its usual definition with negative connotations as a set of resilient practices with the capacity to mitigate crises and enhance food security (Barthel et al. 2013; Colding and Barthel 2013; Taylor and Lovell 2014). Instead, the paper seeks to link two emerging literatures: the

literature devoted to Northern FSP as an important, innovative, environmentally and socially beneficial set of everyday practices, and that devoted to the possibility to view resilience as a capacity that is proactive, preventative, future-oriented, and transformation-enabling.

Localised food related initiatives in the Global North have been increasingly interpreted as manifestations of enhanced social or community resilience (Okvat and Zautra 2011; Colding and Barthel 2013; Sonnino and Griggs-Trevarthen 2013; McClintock 2016). These initiatives operate either as part of the commercial sector (community-supported agriculture, city farms and farmers' markets) or outside the market (community gardens and allotment gardens). Regardless of where they stand in relation to the market, the conceptualisations of these local food initiatives that stress their enhanced social resilience share two features that, when considered together, seem actually to undermine claims that they are examples of resilience. First, local food initiatives are small in scale and have a niche quality to them. Food projects in the form of non-market urban gardening are small, isolated "pockets of resilience" (Barthel, Parker and Ernston 2013) that are only supported by particular social groups; even the commercial versions of such projects depend heavily on the efforts of small groups of "wilful individuals" (Sonnino and Griggs-Trevarthen 2013). Second, these initiatives are highly precarious and unstable. They may depend on individuals and/or temporary funding (in the case of market-based initiatives), their land tenure may be insecure, or the projects may be just temporary (urban gardening projects), and as a result these activities tend to be precarious, marginal, residual, and interstitial (Tornaghi 2016). Furthermore, instead of a proactive, preventative, and transformation-enabling capacity, in this literature resilience is viewed primarily as a defensive capacity, responding to and sheltering local people from the disruptive consequences of externally induced change (Sonnino and Griggs-Trevarthen 2013), and as a crisis-mitigating capacity (Barthel, Parker and Ernston 2013).

Supporting our claims with the findings from a recent national survey on food and other informal economic practices in the Czech Republic, we propose a novel perspective on food relocalization and resilience. We contend that FSP can be understood as a form of resilience based on food relocalization that not only is not characterized by the weaknesses and contradictions of local food initiatives outlined above but also represents a more proactive, future-oriented, and transformative conceptualization of resilience than the usual reactive and defensive interpretation.

This paper is structured as follows. First, we discuss key developments in how social resilience and FSP are understood and explain how we use the two terms. Second, we review the mainstream readings of FSP and resilience in the East European part of the Global North in the existing academic literature and highlight the problematic aspects of these readings. Third, we present the findings from a national survey conducted in the Czech Republic in 2015 and show how these findings allow us to retrieve Czech (and by extension Central and East European; CEE) FSP from the category of defensive, needs-related, and backward-looking activity and recast it as a set of resilient, low-level resistance-nurturing and transformation-enabling practices.

Food self-provisioning and resilience: key developments

Up until recently, FSP in the context of the Global North was predominantly viewed as a traditional and culturally embedded, but also residual set of practices (Brown, Xu and Toth 1998; Teitelbaum and Beckley 2006; Kortright and Wakefield 2011). Academic research on FSP, understood as a manifestation of hardship and survival and as a coping strategy in rural areas, was for a long time the preserve of development studies and seen as an impediment to or a consequence of the transition of Southern subsistence economies to market economies. Alternative food scholarship, with its focus on reflexive consumerism's potential for sustainable transformation of Northern industrialized food systems (DuPuis 2000; Guthman 2003), tended to overlook the informal practice of the home gardening of food. This practice was viewed as a passive and defensive strategy of marginalized persons, rather than as a transformative action engaged in by subjects who consciously reflect on and challenge the food system's deleterious social and environmental effects.

John Taylor and Sarah Lovell (2014) highlighted the "invisibility" of Northern home gardens: considered an unimportant relic of the past, home gardens had for a long time been overlooked by government agencies, non-governmental organizations, and academics. What propelled home gardening in the North into the spotlight in the wake of the 2008 economic crisis was the emergence of the kind of food concerns, such as food security and food justice, that had traditionally been associated with research in Southern societies. This underlined the need for food scholarship to move beyond reflexive, market-based alternatives and to start exploring informal food practices. Summing up recent developments, Justin Schupp and Jeff Sharp (2012, 103) stated that "it may be time for renewed study of home gardening" [in the Global North; authors' note] because of "the growing interest in local food systems and contemporary responses to economic hardship". While we acknowledge the validity of the latter point, i.e. that in specific times and places in the Global North, including CEE, FSP may constitute a response to hardship, in this paper we focus on their first point and view home gardening primarily as an ultimate form of food relocalization.

In an almost parallel process, the concept of resilience has similarly been repositioned and adapted into a new context. Resilience was for a long time a concept that in the social sciences was primarily used in development studies, where it was a key term describing the conditions of Southern societies. However, resilience has recently been gaining ground as a research topic in the developed world (Wilson 2012). Nonetheless, whether researched in Southern or Northern contexts, resilience has mostly been understood as a "metaphor against change", a "bounce-back ability", and adaptability to crises (DeVerteuil and Golubchikov 2016, 143). In other words, in keeping with its original conceptualization in the physical and natural sciences, it was viewed as "the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure and feedbacks, and therefore identity, that is, the capacity to change in order to maintain the same identity" (Folke et al. 2010, unpagged).

When it first figured in studies of the resilience of ecosystems (e.g. Holling 1986; Holling et al. 1995) resilience was presented as one of the three possible outcomes of disturbance – resilience, adaptation and transformation – and the focus of attention was more on the vulnerability end of the vulnerability–resilience spectrum. When the concept of resilience started to gain currency in the social sciences it was through studies of the relationship between the vulnerability of ecological and social systems (Adger 2000; 2006) and the concept found use primarily in studies of vulnerable communities and (post)disaster management in the Global South. Neil Adger (2000) equated vulnerability with macro-scale disturbances such as economic and political upheavals and defined it as a “state of susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt” (Adger 2006, 268). He related vulnerability to the rise of coping strategies adopted by local communities and households seeking to maintain their resilience. Amidst the increasing precariousness and economic vulnerability to which a growing number of households and communities in the Global North have been exposed in the last decade, resilience, understood as a coping mechanism, has become an ever more relevant concept. At the same time, however, critical observers have noted how conveniently and neatly the concept is able to incorporate a shift in the assignment of risk and responsibility, and its potential to conceal the redistribution of costs between the state, the private sector, and communities (White and O’Hare 2014).

The concept of social resilience used in the social sciences (King 2008; Davidson 2010; Magis 2010; Wilson 2010 and 2012) initially retained the traits with which it was associated in the physical and natural sciences: the link to disturbance and stress on the one hand and to the capacity to facilitate recovery after a traumatic event or catastrophe on the other. Accordingly, social resilience was seen as the “ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change” (Adger 2000, 347).² External stresses and disturbances were understood primarily in the form of externally imposed social, economic, and political upheavals (Adger 2000, 361).

One important insight from early studies of social resilience was that in contrast to ecological systems, in which complexity (expressions of diversity and connectivity across scales to enable feedback and buffer the capacity to prevent revolt) helps to maintain and enhance systems’ resilience (Davidson 2010, 1138), in social systems the relationship between disturbance and complexity is less deterministic. Tendencies towards complexity in social systems are defined not solely by structural variables but by human agency. Moreover, unlike ecosystems, in which macro-scale processes are usually slow and micro-scale processes fast, in social systems macro-scale processes related to globalization can be fast while processes at the local level and within small groups may well be an elemental source of system vitality (Davidson 2010).

Social resilience understood as adaptability to a disturbance is central to food security studies (e.g. Pelletier et al. 2016; Oyo and Kalema 2016; Gaire, Beilin and Miller 2015). In this literature, disturbance, food insecurity, and households’ coping strategy are closely

related to vulnerability of livelihoods and to poverty. Adger (2006) traced this strand of thought to an earlier analysis of vulnerability as a breakdown in endowments and to the endowment and entitlement concepts developed by Amartya Sen (1981; 1984) in relation to the issue of food security. A person's "endowment set" was defined as a combination of all resources legally owned by a person conforming to established norms and practices. In practice, endowments include tangible (land, equipment, animals) and intangible (knowledge and skills, membership in a community, labour) resources (Osmani 1993, 3). A person's "entitlement set" constitutes all possible combinations of goods and services that a person can legally obtain by using the resources of his or her endowment set (Osmani 1993). The resources in an endowment set may be used in several ways to obtain goods such as food: a) *exchange* (people may use their labour to purchase food); b) *transfer* (people may use their membership in a local community to obtain food as a gift); and c) *production* (using their land and skills people may produce their food). The theory of entitlements addresses the issue of threats to food security that stem from social processes, not natural hazards. The underlying idea is that the greater diversity of entitlements available to a person, household, or community, the more likely they are to avoid becoming vulnerable and to be food secure and consequently resilient.

Following the social turn for resilience, scholars started to reimagine resilience in a more positive way, extending the notion beyond the ability to recover from a trauma and highlighting its preventative character. In this understanding the function of social resilience is to avoid poor outcomes (Wilson 2010) and resilient communities are characterized by an abundance of social capital. Social capital includes networks of social connections and the relative inter-connectedness of people, and characteristics such as "trust" and the cultural and institutional "glue" that binds communities together (Wilson 2012; Magis 2010). In the past several years this conceptualization of resilience has enjoyed increasing popularity, prompting several observers to declare that "resilience has replaced sustainability as a concept *du jour*" (Miller 2016, unpagged) and that it "is becoming a key *representational* concept across academic, policy and planning literatures" (Pink and Lewis 2014, 695). While associating certain social relations with the term "capital" was initially viewed as problematic because it turns these social relations into investments that can be monetized, exchanged, and used to generate profitable returns (Gibson-Graham 2006), more recently this understanding of resilience has been criticized at a more fundamental level for its tendency to maintain the status quo. The deployment of social and community resilience in both political and academic parlance has been equated with seeking to protect the interests of the powerful (Brown 2014), divert attention away from the existence of social divisions and inequalities (MacKinnon and Derickson 2013), and shift the burden of austerity policies onto the shoulders of the marginalized in the guise of individual and community empowerment and responsabilization. In other words, this strand of literature frames social resilience as a reactionary tool of neoliberal governance (MacKinnon and Derickson 2013), further disempowering disadvantaged social groups rather than enabling and promoting change and capacity-building.

Departing from the notion of social resilience as a response to disturbance, Kristen Magis (2010, 408) highlighted the proactive character of resilience as change: "It recognizes,

accepts, builds capacity for, and engages change.” In response to the social sciences’ growing criticism of resilience as a reactionary tool of governance and a trope justifying austerity policies and in opposition to its conceptualization as a passive condition precluding transformative action, Geoff DeVerteuil and Oleg Golubchikov (2016, 145) proposed re-imagining resilience as “far more polytonal and less inherently sinister and conservative”. They sought to reconstruct and strengthen resilience as a concept that bolsters “alternate and previous” practices that are orthogonal to the dominant naturalized and neo-liberal ones”(146). Following Brown (2014) they emphasized the capacity of resilience to challenge the status quo and to design and shape alternative futures. Resilience should be seen as imparting a sense of adaptive capacity, a proactivity, and a potential for learning, as “internally produced and not just externally induced”, and as a “dynamic process in which change and reinvention provide the grounds for fundamental reform” (DeVerteuil and Golubchikov 2016, 147). They champion a notion of “evolutionary resilience” that is proactive and open to creating a new normality over “equilibrium resilience”, which seeks to maintain the status quo.

This view relates social resilience to the incremental and slow-moving social change that occurs in informal, small-scale institutions such as families, households, and local communities, which facilitate everyday social reproduction. While resilience on this scale may lack the capacity to bring about the systemic transformation of neoliberalism, it undermines the latter’s hegemony and contributes to the adjustment and greater diversity of existing social practices. Crucially for this paper’s argument, DeVerteuil and Golubchikov (2016) claim that as resilience relies on a web of social relations, it stimulates social networks and hence can lay the ground for resistance and social transformation.

In the next two sections we will use the example of Czech FSP to demonstrate how these everyday food practices are consistent with a) the traditional notion of resilience as an ability to cope with external stresses and as a food security enhancing capacity during crisis; and b) as resilience that is potentially transformative and a precursor to resistance.

Post-socialist countries of Central and Eastern Europe, home grown food and resistance

Given the tendency in the “transition literature” to cast the post-socialist societies of CEE after 1989 as underdeveloped and needing to “catch up” with the West, and given the economic disintegration many of these societies experienced in the 1990s, the limited attempt to integrate research on CEE transformation in resilience scholarship is striking. In contrast to the lack of analyses of post-1989 developments in CEE that employ the concept of resilience, there is a large body of literature that *implicitly* relates post-socialist FSP to resilience - a number of early studies conceptualized FSP practices as a response to shock and crisis after the centralized economies were dismantled (Caskie 2000; Rose and Tikhomirov 1993; tho Seeth et al. 1998; Southworth 2006). However, none of these accounts invoked resilience *per se* or attempted to frame the analysis of these developments in these terms.³ Retrospectively, this might be viewed as one of the most pertinent examples of the “blocked lessons that could have been learned from one of the

more dramatic, unexpected and academically accessible political and social transformations in history” (Kay, Shubin and Thelen 2012, 57).

Perhaps even more confusing and counterintuitive is the tendency in the few CEE analyses employing resilience that do exist to consider the outcome of a major disturbance such as the “shock therapy” to which CEE societies were subjected after 1989 to actually represent an overall *loss* of resilience: “[F]or some communities (e.g. East Germany) evidence suggests that the post-socialist transition has often led to an overall lowering of resilience, with limited evidence yet that community-level resilience levels have recovered to pre-disturbance levels” (Wilson 2012, 175). In short, it seems that so far post-socialist societies have had little to offer resilience scholarship. They were seen as having lost the capacity for resilience they may have once possessed and as having failed to adapt to changes in macro-scalar structures.

In this paper we take a different view. We acknowledge that, in contrast to Geoff Wilson’s account, the survival of societies that experienced as much as a 40 per cent fall in GDP, as some post-Soviet countries did in the 1990s, yet managed to adapt and “bounce back” is in fact an example of enormous resilience. In some cases FSP must have played an important role in this demonstration of remarkable resilience in its traditional definition as the capacity to withstand disturbance. For example, Southworth (2006) showed how between 1990 and 1993 the percentage of Russian families with a garden or plot of land increased from approximately 26 per cent to about 43 per cent.

There are two main readings of the widespread practice of FSP⁴ in CEE in the state socialist era, both of which conceptualise FSP as a *response*. First, the majority of observers interpret the large-scale household production of food (in terms of the proportion of the population involved) in economic terms as a micro-level, household-level *response* to shortages and inefficiencies at the macro-level in the state socialist management of the economy. This economic interpretation was typically deployed in relation to the former Soviet Union (Caldwell 2002), but was also applied to other socialist countries in CEE (Rose and Tikhomirov 2003; Acheson 2007; Alber and Kohler 2008). The second reading focused on the political dimension of these everyday practices. It also conceptualized socialist-era FSP as a passive *response* – in this case to agency on the side of the regime. In exchange for rescinding public political activity, citizens were left alone to retreat to their gardens to cultivate plants and friendships in the private sphere (Bren 2002; Novák 2013). Some authors went as far as to claim that the widespread practices of home gardening and food preservation represented the stagnant socialist temporality, backwardness, and lack of modernity (Činátl 2010).

We acknowledge that in certain circumstances and times in the socialist-era CEE, FSP could productively be described as resilience in the sense that it was a reaction to externally imposed social and economic disturbances. Such disturbances, for example in the form of shortages resulting from problems of production and distribution, are documented in the former Soviet Union (Clarke et al. 2010; Rose and Tikhomirov 1993), but they did not affect CEE countries such as the former Czechoslovakia and Hungary (Author et al. YEAR). We are moreover reluctant to accept the conceptualization of these practices as a manifestation of

citizens' passive submission and their surrender of agency to the regime, as the second reading suggested. We offer an alternative interpretation that allows for the possibility of agency on the side of citizens. Zsuzsa Gille's (2010) work on the longing of people in pre-1989 CEE for normality provides an important insight. Citing Václav Havel's "dream to live in a small boring European country", Gille explained how this dream was shared beyond dissident circles in the population at large. Normality was not simply equated with an end to shortages (in addition, not all CEE socialist countries experienced shortages; authors' note), but above all with an end to the constant state of political mobilization and the effects of imposed activism that citizens rejected and were tired of. Citizens of socialist states valued "everyday peace and quiet, routine and calculability – in sum normality" (Gille 2010, 21). We would argue, therefore, that rather than representing a response to the regime, or collaboration with or submission to it, garden and household food production were important, common, and easily accessible articulations of the desire for a normal, apolitical, and private space. They could consequently be conceived of as sites of low-level everyday resistance or, in Gille's words, as the "'weapons of the weak'-type resistance" (Gille 2010, 14).

We contend that the point about CEE FSP as a form of low-level, politically inflected resistance can be extended to the post-socialist era. As shown in previous work (Author and Author YEAR; Author and Author YEAR), in the post-1989 period in CEE countries such as the Czech Republic, FSP was not, in most cases, a response to economic crisis or an articulation of defensive strategies prompted by dietary deficiencies or economic austerity (see further details in the next section, and also in Author and Author forthcoming).

It is equally difficult to cast Czech FSP as a practice that is radical in its intent but neoliberal in its outcomes, as Nathan McClintock (2014) proposed in reference to urban gardening more generally. In the Czech Republic, there have been no signs of top-down attempts by the state to take advantage of the existence of widespread household production or to promote this form of food provisioning to advance a neoliberal agenda. While this is what post-socialist governments have been doing in other areas since the early 1990s, they have not resorted to promoting FSP as an articulation of independence and self-sufficiency, personal responsibility, self-regulation and as a means of instillation of personal responsibility. In fact, state authorities have often cast these practices as an undesirable legacy of the socialist past, as economically inefficient, and as an obstacle to private enterprise, marketization of the food system, and economic growth – in short to the neoliberalization of the society:

"Ineffective self-provisioning habits (eggs, poultry, potatoes, vegetables, fruits) hang over from the past, which contributes to the relatively low purchasing power of the countryside." (MMR and MZe 2000)

The opposition of central and local governments to FSP has assumed its most antagonistic form in conflicts over allotment sites in major Czech cities. Allotments in urban areas are often perceived as an obstacle to development and local governments typically work in collusion with private developers in their destruction. As a result there have been episodes of outright, organized political resistance put up by allotment holders and their supporters (Hořková et al. 2008). However, like in other post-socialist contexts, the protests and

resistance have been sporadic and lacking in vigour (Mamonova 2015; Visser 2010; Visser et al. 2015). Instead, FSP-related resistance in CEE post-socialist countries has been tacit or silent. In this sense FSP can be seen as a low-level and everyday form of resistance to the perceived risks associated with industrially produced food and to the risks inherent in the market food economy.

We argue that FSP counters the individualization and atomization of the society by promoting sociability, generosity, and cooperation. It is also a reaction to the illegibility of an increasingly postmodern society, to “a world of confused senses” (Thrift 2002, 30), in which gardens provide a sense of normality, simplicity, contact with nature, and directly visible and easy-to-grasp connections between inputs and outcomes. FSP is thus again a silent form of resistance to a hegemonic economic and political regime, but this time the resistance is to neoliberal capitalism, rather than state socialism, as it was three decades ago. Nonetheless, it is not resistance driven by the need to fill the void left by the rolling back of the state, but created by exuberance and abundance (Author and Author YEAR). At the most basic level it poses a challenge to the corporate food system, which has to forgo considerable profits. However, in a way reminiscent of the subtle workings of the *Cittaslow* movement (Pink and Lewis 2014), post-socialist FSP can be viewed as a form of resistance which does not take a stance against the world directly, but has the capacity to deflect what is seen in it that seems undesirable, to channel it away or at least to make it matter less.

Czech food self-provisioning: practices of everyday resilience and resistance

The Czech Republic, the case study at the centre of this paper’s investigation into post-socialist FSP and resilience, has undergone a profound social, economic, and political transformation since 1989.⁵ The restructuring of the economy resulted in a profound macro-level transformation and diversification of agri-food systems, both on the production side (new and more diverse structures of ownership, work organization, productivity) and on the consumption side (supermarketization, longer food-supply chains, trade liberalization). However, at the micro-level, FSP — as perhaps the most concealed component of post-socialist agri-food systems — has been left largely intact by these transformations. In spite of the widely shared expectations that informal household food production would be an important source of new commercial family farming (Pallot and Nefedova 2003), this conversion has rarely occurred. Instead, despite some reduction in the scale and intensity of FSP compared to pre-1989 levels, two and a half decades since the start of the transition these practices have remained widespread in countries like the Czech Republic (38 per cent of the population in 2015; Author and Author YEAR), Hungary (36 per cent in 2013; Balázs 2016), and Poland (54 per cent in 2011; Author and Author YEAR).

To estimate the capacity of FSP to enhance social resilience, we explored a range of motives for engaging in and social networks established through these practices, which were examined in a large-scale survey into Czech households’ FSP and other non-market economic practices. A representative sample of 2058 households participated in the survey and they were selected using quota sampling and by matching the characteristics of the

Czech population in terms of gender, age, level of education, municipality size, and region of residence. The data were collected by a panel of 301 interviewers in face-to-face interviews. The survey was conducted in April, May, and June 2015.

The survey results confirmed that FSP remains a common practice: 38 per cent of Czech households produce some food in either a garden or an allotment and nearly two-thirds (64 per cent) of these households (and therefore one-quarter of all Czech households) also give some of their produce to others. Moreover, FSP is not a practice that concentrated solely in the rural periphery since both rural and urban populations practice it to a considerable degree: 60 per cent of rural household in settlements with under 2,000 inhabitants grow food, but so too do 25 per cent of households in cities with more than 100,000 inhabitants. The urban-rural difference is easily explained by the different level of access to land (land ownership or lease).

Compared to market supply, FSP is only a secondary source of food for all but a tiny minority of food-producing households. However, FSP is a considerable source of supply of several basic food items. When only food-growing households are considered, (professional farmers have been excluded from these calculations), then 41 percent of vegetables, 40 per cent of fruits and 38 per cent of eggs consumed in these households come from non-market sources (Table 1). When both food-growing and non-growing households are considered, one-fifth of all vegetables, fruits, potatoes, and eggs consumed in Czech households come from such sources and are either directly produced by the household or received in the form of a gift (Table 2). These are significant percentages compared to the figures on these practices in West European countries. In the UK, for example, only 3.1 per cent of fresh fruit and vegetables and five per cent of eggs used by households were obtained through FSP and sharing in 2014 (DEFRA 2014, 14).

It is evident, then, that Czech FSP constitutes more than just “pockets of resilience” (Barthel, Parker and Ernston 2013). According to the traditional conceptualization of resilience as the capacity to cope with adversity and as a food security bolstering capacity, FSP extends, in a key way, the range of food entitlements (Sen 1981 and 1984) beyond the usually near exclusive reliance, in the context of the Global North, on the exchange entitlement (people use their labour to purchase food). Czech FSP and sharing increase the diversity of the portfolio of entitlements to include the production entitlement (people produce food using their land and skills) and the transfer entitlement (people use their membership in a local community to obtain food as a gift or use their social networks to share food). We would also argue, however, that this greater diversity of food supply could be viewed as a form of preventative and transformation-enabling resilience, as it offers a wider range of practitioners a greater opportunity for creativity and experimentation than the reliance on a more limited range of sources of food supply.

Table 1: The sources of selected types of food in food-growing households (Czech Republic, 2015)

Type of food	Household food self-provisioning (%)	Received gifts/ Sharing (%)	Retail sector (%)	Total (%)
Vegetables	34.8	5.8	59.4	100.0
Fruits	32.6	7.6	59.8	100.0
Potatoes	27.9	6.7	65.4	100.0
Eggs	27.4	10.2	62.4	100.0
Meat	8.4	4.3	87.3	100.0
Honey	4.7	22.5	72.8	100.0

Based on respondents' estimates. Only households with access to land and producing some food are included (N = 782).

Data source: Large-scale (N = 2058) representative survey conducted in the Czech Republic in 2015.

Table 2: The sources of selected types of food in the Czech Republic (2015; both food-growing and non-growing households included)

Type of food	Household food self-provisioning (%)	Received gifts/ Sharing (%)	Retail sector (%)	Total (%)
Vegetables	14.2	5.1	80.7	100.0
Fruits	13.4	6.6	80.0	100.0
Potatoes	11.1	6.1	81.8	100.0
Eggs	11.1	8.9	80.0	100.0
Meat	3.4	3.2	93.4	100.0
Honey	2.1	16.9	81.0	100.0

Based on respondents' estimates.

Data source: Large-scale (N = 2058) representative survey conducted in the Czech Republic in 2015.

Further, the extent of Czech FSP cannot be explained as a coping strategy of poor or disadvantaged sections of society or as a practice concentrated in peripheral, rural, or "lagging" regions. Food-producing households are evenly represented in all strata of Czech society, and in all regions, with food-growing and non-growing households represented in very similar shares amongst all classes and income and education categories (no statistically significant effect of class, income, or education on the extent of household FSP was found). Only age was found to be a statistically significant explanation of the scale of

household FSP, with households made up of or including seniors being more active in domestic food production than households made up of younger people. We explain the greater incidence of household FSP among retired people as due to their having more free time to engage in this practice, rather than being due to need or necessity (Author and Author forthcoming).

This interpretation of FSP as a pleasurable activity practiced by all social groups, rather than a strategy driven by economic needs, is further supported by findings concerning the motivation for domestic food production. Obtaining fresh or healthy food was cited by 50 per cent of food-producing households as the primary reason for producing food, and 16 per cent of households indicated “hobby” as their primary motivation. Economic reasons are important, but only 16 per cent of food-producing households chose them as the top motivation. The fact that the share of respondents who viewed these practices as above all economically-motivated was significantly larger among non-growing households – in contrast to the motivations expressed by food-growing respondents themselves – is evidence of the lingering stereotypical perception of FSP in society as driven by economic need (Author and Author forthcoming).

These insights allow us to reimagine Czech FSP as a form of resilience that is internally produced rather than externally induced. This conception of household food production goes beyond the status quo-accepting “equilibrium resilience” and instead can be viewed as “evolutionary resilience”, which is proactive, preventative, and open to creating a new normality (DeVerteuil and Golubchikov 2016).

Some food produced in Czech households is shared: 64 per cent of food-producing households share a portion of what they produce with others. Food sharing can be viewed as a practice that fosters social bonds and strengthens social networks. While the act of giving food (like any other gift) can establish relations of obligation and reciprocity and can be interpreted as an indicator of economic hardship (Baird and Gray 2014), the nature of the networks formed by Czech households sharing domestic food production does not support this. The survey respondents acknowledged and valued the social ties established and maintained through food sharing, with social motivations cited far more often than feelings of obligation as the primary reason for sharing food: 31 per cent of households that shared more than 1/10 of their production cited “the joy of pleasing other people” as their reason for doing so, while 13 per cent claimed they did so “to maintain good relations with friends and neighbours”, 9 per cent said it was “to enjoy time with friends”, and 7 per cent wanted “to present the results of my labour”.

Moreover, most interactions within food-sharing networks are not reciprocal, which they would be expected to be if they were gift transactions based on obligation and mutuality. We infer that the food-sharing networks are for the most part non-reciprocal in nature from the fact that 51 per cent of households participate only as recipients in these networks. When categories of households according to the mode of their participation in food sharing networks - 51 per cent of households participate only as recipients, 45 per cent only as givers, and 4 per cent both give and receive - are compared by socioeconomic status, we find that sharing behaviour is very similar across all social groups and is not

significantly conditioned by class, income, or education level. There is certainly no evidence of food transfers from the rich to the poor. On the contrary, we found more affluent households in the “receive-only” category more often than poorer households. Older people are particularly active in food-sharing networks. While family relations are important constituents of sharing networks, most of the networks are not based solely on kinship relations: 65 per cent of food-sharing households were part of networks in which at least one member was from outside their extended family. Another 22 per cent of households participated in networks that did not include any other member of their family.

We found that, besides fostering social relations, sharing practices also strengthen trust, which is a key component of social resilience (Wilson 2012; Magis 2010). If we take the willingness to lend a significant amount of money to another person⁶ as a proxy for trust, it is possible to empirically establish the link between FSP and sharing on the one hand and trust on the other. Respondents from food-growing households have been found to be more inclined to lend the money to people outside their households than respondents from households that do not grow food. Respondents from food-producing households reported having lent money to a larger number of recipients and more of the lendees were reported as being from outside the extended family than what was observed among non-growing households. Food-sharing households were thus willing to enter into more diverse relationships when lending money in terms of the number of lendees and type of relationship with them.

Similarly, respondents from food-growing households knew significantly more people outside their family to whom they claimed they could turn if they needed to borrow the same amount of money (4.1 potential lenders in the case of people from food-producing households versus 3.6 lenders in the case of non-producing households). Only 9 per cent of respondents from food-growing households did not know anyone whom they could approach to ask for a loan, while among non-producing households this figure was 13 per cent.

This empirical inquiry into the relationship between money lending as a proxy for trust and domestic food production and sharing suggested that people who grow food are more inclined to trust other people. It appears that the networks established through food sharing strengthen trust among their members and in turn contribute to fostering preventative and transformation-enabling social resilience.

It is difficult, in the light of these findings, to read Czech FSP as a form of resilience conducive to the further neoliberalization of society and processes that protect the interests of the powerful and entangle the less powerful in networks of obligation and reciprocity. Sharing seems to be driven by more altruistic motivations. Given that it is the less affluent segments of society that are more generous when it comes to sharing their produce, Czech FSP cannot be described as a manifestation of responsabilization and social disempowering and as a reactionary tool of governance (MacKinnon and Derickson 2013). Instead, it is motivated primarily by joy and interest in forming social relations that are not bound by a sense of obligation, and it helps to enhance trust among people. While home food growers do not pose any direct and intentional challenge to the mainstream food

economy, by developing a diverse portfolio of food sources they are reinforcing social resilience, which not only offers protection against disturbances but also holds the possibility for future transformation and social innovation.⁷

Conclusion

Drawing on an extensive survey conducted in the Czech Republic and on two emerging strands of literature on FSP and resilience in the Global North, we sought to derive new insights and contributions to the fast-growing research on social resilience. Far from being an economic strategy driven by necessity, Czech FSP and food sharing is a widespread set of practices and is driven primarily by non-economic needs such as the desire for fresh and healthy food and to strengthen social ties. Importantly, these practices are not concentrated in disadvantaged regions or segments of society. They are evenly spread across society irrespective of differences in education, income, and class, and they are widespread in both rural and urban settings. FSP is thus less vulnerable to the critique often levelled at alternative food networks about their inability to serve people from diverse income, education, and occupational backgrounds (McEntee 2010, 787).

Given their prevalence in both the pre- and post-1989 period, these practices can be viewed as “slow” micro-scale processes that contribute to the stability of a society that was exposed to fast macro-scale and externally induced restructuring. Czech FSP has stronger resilience potential than the emblematic but rather “niche” and somewhat elitist market-based alternative food networks (Forssell and Lankoski 2015), which are often dependent on limited and intermittent resources. One factor that seems to set (Czech) FSP apart from more fragile, precarious, and interstitial local food initiatives such as (urban) community gardening and market-based alternative food networks is the greater security and stability of the land used for these activities. Privately owned gardens are a more secure form of land tenure than allotment sites, and are much more secure than the leased (urban) land on which many food relocalization initiatives rely.

Non-market FSP and sharing significantly enhance food security as they diversify the range of food entitlements available to a large segment of Czech society. These practices extend the portfolio of food entitlements beyond the usual exchange entitlement to include production and transfer entitlements. It should be noted moreover that informal food sharing among Czech households extends beyond the circle of food growers as a large share of households who do not practice self-provisioning still receive food from those households that do. As highlighted above, this practice of sharing food among households builds social capital and social networks.

While FSP can serve as an effective response to a crisis and can be viewed as a form of resilience that seeks to preserve the status quo, we sought to demonstrate that it offers more than this. FSP is largely driven by positive motivations, which means it can also be viewed as a form of resilience that is proactive, preventative, future-oriented, and transformation-enabling. Because it lies largely outside the market, it is a form of resilience

that bolsters practices that are orthogonal to the dominant naturalized practices. It holds the possibility of a low-level resistance and transformation-enabling practices.

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REFERENCES:

Author and Author YEAR

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Acheson, J. 2007. "Household exchange networks in post-socialist Slovakia." *Human Organization* 66 (4): 405–413.

Adger, W.N. 2000. "Social and ecological resilience: are they related?" *Progress in Human Geography* 24 (3): 347-364.

Adger, W.N. 2006 "Vulnerability." *Global Environmental Change* 16 (3): 268-281.

Alber, J. and U. Kohler. 2008. "Informal food production in the enlarged European Union." *Social Indicators Research* 89 (1): 113–127.

Baird, T.D. and C.L. Gray. 2014. "Livelihood diversification and shifting social networks of exchange: a social network transition?" *World Development* 60: 14-30.

Balázs, B. 2016. "Food self-provisioning – the role of non-market exchanges in sustainable food supply." In *Sustainable value chains for sustainable food systems* edited by A. Meybeck and S. Redfern, 73-78. Rome: Food and Agriculture Organisation of the United Nations. Available online at <http://www.fao.org/3/a-i6511e.pdf> (accessed on 21 February 2017).

Barthel, S., J. Parker and H. Ernston. 2013. "Food and green space in cities: a resilience lens on gardens and urban environmental movements." *Urban Studies* 50 (1): 1-18.

Bren, P. 2002. "Weekend Getaways: The Chata, the Tramp, and the Politics of Private Life in Post-1968 Czechoslovakia." In *Socialist Space: Sites of Everyday Life in the Eastern Bloc*, edited by D. Crowley and S.E. Reid, 123-140. Oxford and New York: Berg.

Brown, R.B., X. Xu and J.F. Toth Jr. 1998. "Lifestyle Options and Economic Strategies: Subsistence Activities in the Mississippi Delta." *Rural Sociology* 63 (4): 599–623.

Brown, K. 2014. "Global Environmental Change: A Social Turn for Resilience." *Progress in Human Geography* 38(1): 107-117.

- Caldwell, M. 2002. "The Social Economy of Food Poverty in Russia." In *Culture and Economy: Contemporary Perspectives*, edited by U. Kockel, 11-34. Hampshire: Ashgate.
- Caskie, P. 2000. "Back to basics: household food production in Russia." *Journal of Agricultural Economics* 51 (2): 196-209.
- Clarke, S., L. Varshavskaya, S. Alasheev and M. Karelina. 2000. "The Myth of the Urban Peasant." *Work, Employment & Society* 14 (3): 481-499.
- Činátl, K. 2009. "Časy normalizace." In *Tesilová kavalérie: Popkulturní obrazy normalizace*, edited by P. A. Bílek and B. Činátlová, 166-183. Příbram: Pistorius & Olšanská.
- Colding, J., and S. Barthel. 2013. "The potential of 'Urban Green Commons' in the resilience building of cities." *Ecological Economics* 86: 156-166.
- Davidson, D.J. 2010. "The applicability of the concept of resilience to social systems: Some sources of optimism and nagging doubts." *Society and Natural Resources* 23 (12): 1135-1149.
- DEFRA (Department for Environment, Food and Rural Affairs). 2015. *Family Food 2014*. London: Department for Environment, Food and Rural Affairs.
- DeVerteuil, G. and O. Golubchikov. 2016. "Can resilience be redeemed? Resilience as metaphor for change, not against change." *City: analysis of urban trends, culture, theory, policy, action* 20 (1): 143-151.
- DuPuis, E. M. 2000. "Not in my body: BHG and the rise of organic milk." *Agriculture and Human Values* 17 (3): 285-295.
- Folke, C., S.R. Carpenter, B. Walker, M. Scheffer, T. Chapin and J. Rockström. 2010. "Resilience Thinking: Integrating Resilience, Adaptability and Transformability." *Ecology and Society* 15 (4). Online <http://www.ecologyandsociety.org/vol15/iss4/art20/>, accessed 18 November 2016.
- Forsell, S. and L. Lankoski. 2015. "The sustainability promise of alternative food networks: and examination through 'alternative' characteristics." *Agriculture and Human Values* 32 (1): 63-75.
- Gaire, K., R. Beilin and F. Miller. 2015. "Withdrawing, resisting, maintaining and adapting: food security and vulnerability in Jumla Nepal." *Regional Environmental Change* (15) 8: 1667-1678.
- Gibson-Graham, J.K. 2006. *A post-capitalist politics*. Minneapolis: University of Minnesota Press.
- Gille, Z. 2010. "Is there a Global Postsocialist Condition?" *Global Society* 24 (1): 9-30.
- Guthman, J. 2003. "Fast food/organic food: reflexive tastes and the making of 'yuppie chow.'" *Social and Cultural Geography* 4 (1) pp. 45-58.

- Holling, C.S. 1986. "The resilience of terrestrial ecosystems: local surprise and global change." In *Sustainable development of the biosphere* edited by W.C. Clark and R.E. Munn 292-317, Cambridge: Cambridge University Press.
- Holling, C.S., D.W. Schindler, B.W. Walker and J. Roughgarden. 1995. "Biodiversity in the functioning of ecosystems: an ecological synthesis." In *Biodiversity loss: economic and ecological issues* edited by C. Perrings, K.G. Mäler, C. Folke, C.S. Holling and B.O. Jansson, 44-83. Cambridge: Cambridge University Press.
- Hošková, K., P. Klvač, V. Králová and L. Mlčák. 2008. "Zahrádkářské kolonie – venkov ve městě." In *Venkovská krajina 2008* edited by J. Dreslerová, 28-33. Hostětín: Veronica.Kay, R., S. Shubin and T. Thelen. 2012. "Editorial: Rural realities in the post-socialist space." *Journal of Rural Studies* 28: 55-62.
- King, C.A. 2008 "Community resilience and contemporary agri-ecological systems: Reconnecting people and food, and people with people." *Systems Research and Behavioural Science* 25: 111-124.
- Kortright, R. and S. Wakefield. 2011. "Edible Backyards: A Qualitative Study of Household Food Growing and its Contributions to Food Security." *Agriculture and Human Values* 28: 39-53.
- MacKinnon D. and K. Driscoll Derickson. 2013. "From Resilience to Resourcefulness: A Critique of Resilience Policy and Activism." *Progress in Human Geography* 37 (2): 253-70.
- Magis, K. 2010. "Community resilience: An indicator of social sustainability." *Society and Natural Resources*, 23: 401-416.
- Mamonova, N. 2015. "Resistance or adaptation? Ukrainian peasants' response to large-scale land acquisitions." *The Journal of Peasant Studies*, 42 (3-4): 607-634.
- McClintock, N. 2014. "Radical, reformist, and garden-variety neoliberal: coming to terms with urban agriculture's contradictions." *Local Environment: The Journal of Justice and Sustainability* 19 (2):147-171.
- McClintock, N. 2016. "Socio-spatial differentiation in the Sustainable City: A mixed-methods assessment of residential gardens in metropolitan Portland, Oregon, USA." *Landscape and Urban Planning* 148: 1-16.
- McEntee, J. 2010. "Contemporary and traditional localism: a conceptualisation of rural local food." *Local Environment: The International Journal of Justice and Sustainability* 15 (9-10): 785-803.
- Miller, A. 2016. "Asher Miller on the Sustainability & Resilience of Our Food System." Blog entry on the Post Carbon Institute website. Online <http://www.postcarbon.org/asher-miller-on-the-sustainability-resilience-of-our-food-system/>, accessed 25 October 2016.
- MMR and MZe (Ministerstvo pro místní rozvoj a Ministerstvo zemědělství). 2000. *Plán SAPARD: Plán rozvoje zemědělství a venkova České republiky na období 2000-2006*. Praha: Ministerstvo pro místní rozvoj a Ministerstvo zemědělství. Online

<http://eagri.cz/public/web/mze/dotace/dobihajici-a-ukoncene-dotace/sapard/programove-a-jine-dokumenty/plan-sapard.html> Accessed 3 Nov 2012.

Novák, A. 2013. "Zahrádkářské osady v reflexivní modernitě: Sociologická reflexe." In *Zahrádkové osady: Stíny minulosti, nebo záblesky budoucnosti?* Edited by P. Gibas, L. Matějovská, A. Novák, E. Rolfová, V. Tvardková, I. Valešová and M. Veselý, 13-26. Praha: KSKE, FHS UK.

Osmani, S. R. 1993. *The Entitlement Approach to Famine: An Assessment*. Working Paper No. 107. Helsinki: The United Nations University/World Institute for Development Economics Research.

Okvat, H.A. and A.J. Zautra. 2011. "Community gardening: A parsimonious path to individual, community, and environmental resilience." *American Journal of Community Psychology* 47 (3-4): 374-387.

Pallot, J. and T. Nefedova. 2003. "Geographical differentiation in household plot production in rural Russia." *Eurasian Geography and Economics* 44: 40-64.

Oyo, B., and B.M. Kalema. 2016. "A System Dynamics Model for Subsistence Farmers' Food Security Resilience in Sub-Saharan Africa." *International Journal of System Dynamics Applications* 5 (1): 17-30.

Pelletier, B, G.H. Hickey, L.B. Kimberly and A. Mude. 2016. "Linking rural livelihood resilience and food security: an international challenge." *Food Security* 8 (3): 469-476.

Pink, S. and T. Lewis. 2014. "Making resilience: everyday affect and global affiliation in Australian Slow Cities." *Cultural Geographies* 21 (4) pp. 695-710.

Rose, R., and Y. Tikhomirov. 1993. "Who grows food in Russia and Eastern Europe?" *Post-Soviet Geography* 34 (2): 111-126.

Sen, A. 1981. *Poverty and Famines: An Essay on Entitlement and Deprivation*. Oxford: Clarendon Press.

Sen, A. 1984. *Resources, Values and Development*. Oxford: Basil Blackwell.

Schupp, J.L. and J.S. Sharp. 2012. "Exploring the social bases of home gardening." *Agriculture and Human Values* 29: 93-105.

Sonnino, R. and C. Griggs-Trevarthen. 2013. "A resilient social economy? Insights from the community food sector in the UK." *Entrepreneurship & Regional Development* 25 (3-4): 272-292.

Southworth, C. 2006. "The Dacha Debate: Household Agriculture and Labor Markets in Post-Socialist Russia." *Rural Sociology* 71 (3): 451-478.

Taylor, J.R. and S. Taylor Lovell. 2014. "Urban home food gardens in the Global North: research traditions and future directions." *Agriculture and Human Values* 31: 285-305.

Teitelbaum, S. and T. Beckley. 2006. "Harvested, Hunted and Home Grown: The Prevalence of Self-Provisioning in Rural Canada." *Journal of Rural and Community Development* 1: 114-

130.

tho Seeth, Harm T., S. Chachnov, A. Surinov and J. von Braun. 1998. "Russian poverty: Muddling through economic transition with garden plots." *World Development* 26 (9): 1611–1624.

Trift, N. 2002. "A hyperactive world." In *Geographies of Global Change: Remapping the World* edited by R.J. Johnston, P.J. Taylor and M. Watts, 29-42. Blackwell Publishing.

Tornaghi, C. 2017. "Urban Agriculture in the Food-Disabling City: (Re)defining Urban Food Justice, Reimagining a Politics of Empowerment." *Antipode* 49 (3): 781-801.

UNDP. 2015. *Work for human development: World development report 2015*. New York: United Nations Development Programme. Online http://hdr.undp.org/sites/default/files/2015_human_development_report_1.pdf

Ungar, M. 2008. "Putting resilience theory into action: Five principles for intervention." In *Resilience in action: Working with youth across cultures and contexts* edited by L. Liebenberg and M. Ungar, 17-38. Toronto: University of Toronto Press.

Visser, O. 2010. "Insecure land rights, obstacles to family farming and the weakness of protest in rural Russia." *Laboratorium* 2 (2): 275-295.

Visser, O., N. Mamonova, M. Spoor, and A. Nikulin. 2015. "'Quiet Food Sovereignty' as Food Sovereignty without a Movement? Insights from Post-socialist Russia." *Globalizations* 12 (4): 513-528.

Walker, B., C.S. Hollin, S.R. Carpenter and A. Kinzig. 2004. "Resilience, adaptability and transformability in social-ecological systems." *Ecology and Society* 9 (2): 5
Online <http://www.ecologyandsociety.org/vol9/iss2/art5>. Accessed 18 Nov 2016.

White, I. and P. O'Hare. 2014. "From Rhetoric to Reality: Which Resilience, Why Resilience, and Whose Resilience in Spatial Planning?" *Environment and Planning C: Government and Policy* 32 (5): 934 – 950

Wilson, G. 2010. "Multifunctional 'quality' and rural community resilience." *Transactions of the Institute of British Geographers* 35 (3):364-381.

Wilson, G.A. 2012. *Community resilience and environmental transitions* Abingdon: Routledge.

¹ According to Arshi Shaikh and Carol Kaupi (2010), this conceptualization is associated with the constructionist and interpretative research orientation in disciplines such as sociology and social work and it relates resilience to human agency, resistance, and survival. This contrasts with the reading of resilience in psychology that offers a more positivist understanding of the term as a personal disposition manifested in personality traits and as a person's response to risk (also referred to as the "dynamic process of resilience").

² Michael Ungar's (2008) definition of resilience as the capacity of individuals and their families and communities to negotiate culturally meaningful ways in which to share resources is useful for this paper's argument.

³ As resilience only became influential in the social sciences in the second half of the 2000s, it was unavoidable that the term would be absent from the early studies of post-socialist transitions conducted in the 1990s and early 2000s. However, the continuing lack of engagement with the term in more recent studies of East European transformations (see Wilson [2012], however, for a brief account of transition as a loss of resilience), both those looking at contemporary developments and studying transitions in retrospective, suggests that, despite the affinity between social responses to transitional processes and resilience, East European societies have been ignored by resilience scholarship.

⁴ For example, the fact that 62 per cent of Bulgarians and 48 per cent of Poles were growing food in 1991 (Rose and Tikhomirov 1993) is a reasonable indicator of the scale of this phenomenon before 1989.

⁵ Despite deep and rapid changes in the post-1989 period, the country has remained relatively prosperous and has retained its ranking on the international Human Development Index (in 1990 the country was 27th in the HDI global ranking, and in 2014 it was 28th). Between 1995 and 2015 gross national income per capita increased by 41 per cent (measured by the purchasing power parity; UNDP 2015, 203). By international standards, the Czech Republic has a low level of social inequality and a relatively low domestic food price level index (it ranged between 2.0 and 2.3 in the 2000 - 2014 period; UNDP [2015]). This is the food purchasing power parity rate divided by the general purchasing power parity rate. The index shows the price of food in a country relative to the price of generic consumption basket in the country (UNDP 2015, 249).

⁶ The amount was set at 1000 Czech Crowns (approximately 37 EUR or 40 US\$ in 2015).

⁷ Possible examples of practical innovations related to informal food practices in the Czech Republic are a mobile phone app "na ovoce" promoting free fruit foraging (<https://na-ovoce.cz/en/mapping-application-development/>) and a website supporting seed sharing "semínkovna" (<https://seminkovny.wordpress.com/>).