

# **Fostering Valuable Participation in Shaping Spaces and Societies: Towards Creating an Ethical Meta Level in the Model Design for Innovativeness**

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## **Abstract**

The approach of an education for innovativeness aims to enable pupils to participate in shaping societies in a mature manner, which includes the appropriation and designing of spaces. This approach is useful for educational and practical concepts such as Spatial Citizenship, which promotes the use of digital geomeia for individual and collective appropriation and re-shaping of spaces. However, encouraging innovativeness may also seem to foster participation in questionable inventing processes with trivial – or even harmful – intentions. Including an ethical meta level in the model design for innovativeness would generate reflection on the purpose of the novelty. In this paper, we look first at theories that address the term 'problem', social innovations and applied ethics, in order then to develop a first attempt at creating an ethical meta level in the model design for innovativeness.

## **Keywords:**

innovativeness, participation, applied ethics, social innovation, appropriation of space

## **1 Introduction**

In the manifold social and human–environment relations, problems arise as outcomes of complex systems. These problems in turn result in the need for reaction and action, and for new solutions, namely innovations. Innovations emerge and take their place in everyday lives, framing and reframing the opportunities and barriers to action. Being innovative saves humans from simply being victims of changing conditions; thus, society and policy call for people's participation in innovation processes so that changes are controlled collectively.

At the same time, a neoliberal (educational) system instrumentalizes this demand with individualization and self-regulation (e.g. Krautz, 2007): educational policy is characterized by calls for efficiency, competitiveness and focus on (ever better) results (Hakala & Uusikylä, 2015). Such practices are also relevant in spatial planning. While several projects exist that seek to involve lay people in planning processes as those who will use the spaces afterwards, some of these are not real forms of participation, and some fail to produce innovative spaces that really address the users' (diverse) needs (e.g. Millei & Imre, 2015). Some practices of

appropriation of spaces are illegalized (regarding street art, for example, see e.g. Scharf et al., 2018). Thus, spatial planning is deeply embedded in normalized models of the appropriation of space, only seldom taking into account the much wider potential of changing spaces that opens up in relational concepts of space. Such neoliberal perspectives only encourage ‘nonparticipation’ and not ‘genuine participation’ (Hart, 1992, p. 9, 11), as it makes it harder for people to act democratically (see e.g. Žižek, 2012).<sup>1</sup>

In order to support humanistic claims without falling into the trap of particular market interests, an education is needed that fosters maturity (Adorno, 1971). Like geography- and geomeia-based approaches such as Spatial Citizenship (or ‘SPACIT’) (Gryl & Jekel, 2012), an education for innovativeness (e.g. Weis et al., 2017) also aims to foster the appropriation of spaces through the use of mainly digital geomeia. Going beyond SPACIT, the model design for innovativeness may foster understanding of an innovative appropriation of spaces, utilizing appropriate tools such as counter-mapping and neogeography, thus using the participatory potential that current geomeia provide.

As a potential basis for participatory spatial planning processes, this paper will outline the more general model design for innovativeness as developed so far, and will also address an eminent problem: in general, new creations and their distribution can also be ethically questionable. Some may be harmful to certain groups, for example through the re-location of people due to mining or the spatial claims of right-wing groups. In order to counter the attribution of ‘innovativeness’ to unethical creations, an ethical meta level is necessary, involving a discussion of the term ‘problem’, social innovations, negative side-effects and the power of interpretation (i.e. who has the power to decide what is innovative) (Scharf et al., 2019).

## 2 The Approach of an Education for Innovativeness: State of the Art

Participation in the shaping and appropriation of spaces has been a subject within geography education and applied geography for a long time, e.g. ‘Public Participation GIS’ (Ramasubramanian, 2010), ‘SPACIT’ (Gryl & Jekel, 2012), and ‘participatory mapping’ (Elwood & Mitchell, 2013). However, several participatory planning projects have resulted in rather traditional outcomes (Vogler et al., 2010; Plötz et al., 2014) which clearly lack attention to the essence of changing and innovating spaces. The approach of an education for innovativeness therefore seems to be promising.

The model design defines innovativeness as ‘the ability to participate in innovation processes’ (Scharf et al., 2018, p. 159; Weis et al., 2017) in order to be able to shape the world in a mature (Adorno, 1971) manner (see e.g. Weis et al., 2017). It differentiates between components which are relevant for being innovative, the innovation process itself, and its possible outcomes.

Reflexivity, creativity and implementivity are described as the central components of innovativeness. Reflexivity is the ability to critically engage with what exists and to identify problem areas (Gryl, 2013; Jekel et al., 2015). According to Gryl (2013), it includes not only

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<sup>1</sup> For a more in-depth description of the neoliberal education system in the context of innovativeness, see e.g. Scharf et al. (2019).

external phenomena, but also one's own thinking (Schneider, 2013) and acting (Luhmann, 1998). This makes reflexivity a necessary prerequisite for creativity (Dewey n/d., cited in Joas, 1992), which is defined as the ability to develop ideas for the solving of identified problems (e.g. Gryl, 2013); it comprises, based on Popitz (2000), imagination and fantasy (Scharf et al., 2019). The ability to convince others by way of argumentation of the existence of problems and/or ideas for solutions is referred to as implementivity (Gryl, 2013; Jekel et al., 2015; Weis et al., 2017). Only through its implementation, through its diffusion, does an idea become an innovation (see e.g. Gryl, 2013).

Reflexivity, creativity and implementivity are important in every single phase of an innovation process (Weis et al., 2017). Such a process is circular and dynamic, and consists of the identification of problem areas, the development of solutions, and their implementation (ibid.). According to Hartmann and Meyer-Wölfing (2003), participation in innovation processes can be both active and reactive (Scharf et al., 2016), which also means that innovation processes are characterized by constant feedback loops and are thus always collaborative (Scharf et al., 2018). Thus reflexivity, for example, is necessary not only in the problem identification phase, but also in the critical questioning of an idea for a solution and/or its implementation strategy (Scharf et al., 2019).

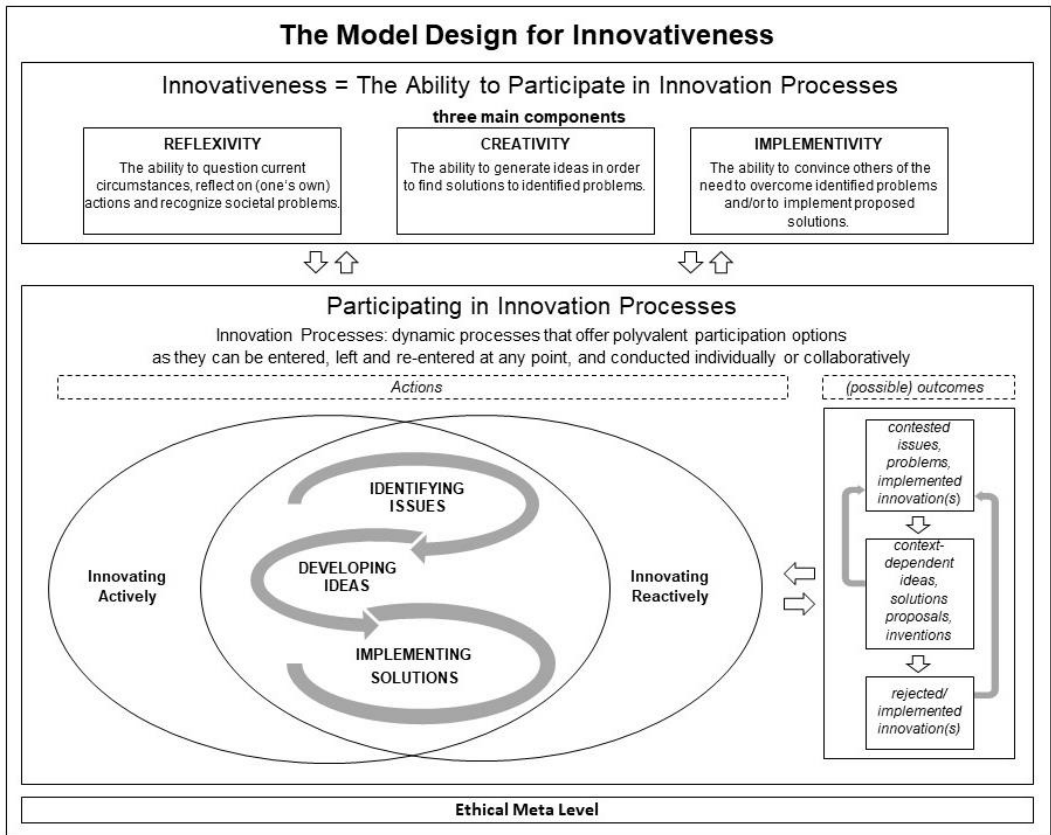
The need for reflexive and communication skills as well as argumentation capabilities to be innovative links innovativeness closely with SPACIT, which partly includes these components, but lacks a more detailed explanation of the nature of spatial innovation. Therefore, the approach of an education for innovativeness fits nicely as a valuable complement.

From an anti-authoritarian perspective, Scharf et al. (2019) (based on remarks by Bröckling (2004) and Joas (1992)) aim at limiting innovativeness to the political ability to participate in the development of society,<sup>2</sup> e.g. by taking a position against social circumstances that are perceived as problematic, as illustrated in Golser et al. (2019) (see Figure 1). This would exclude participating in processes that create something new but trivial, e.g. a crispier brand of potato chips, and would include e.g. influencing social processes through the use of geomedial.<sup>3</sup> However, by limiting innovativeness to a political ability, the approach could allow the creation of, or participation in, something harmful, e.g. the Ku Klux Klan. In order to avoid such an attribution to innovativeness, and to buttress Scharf et al.'s (2019) ideas theoretically, an ethical meta level is necessary.

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<sup>2</sup> Here, the term 'political' is to be understood in a broad, citizenship education manner (e.g. SPACIT, Gryl & Jekel, 2012).

<sup>3</sup> Geomedial may also be like catalysts, as they provide new insights into spatial problems (e.g. visual analytics, hypothesis generation (see MacEachren, 1992), and may work as innovation tools as suggested by SPACIT.



**Figure 1:** The model design for innovativeness (translation based on Golser et al., 2019, p. 64, itself adapted from Weis et al., 2017, p. 386-5), complemented with an ethical meta level.<sup>4</sup>

### 3 Towards Creating an Ethical Meta Level

If we take a closer look at the model design for innovativeness, some questions arise: What exactly is a problem? Is focusing on social innovations the way to fulfil the aspiration of being aligned with the aim of limiting innovativeness to a political theory? Assuming that social innovations aim at solving social problems, who is in charge of determining that a problem has been ‘solved’, especially if there are conflicting interests? How should unintended side effects be dealt with?

#### 3.1 The Term ‘Problem’

Attempting to address problems in innovation processes is always challenging because the perception of a problem is limited to certain individuals or groups, and complex situations

<sup>4</sup>The ethical meta level itself is described in Figure 2.

never involve only disadvantages for all. For instance, the global market involves inequalities in income and human rights imbalances, with serious consequences for employees in poorer countries but a better standard of living in richer ones and greater profits for international companies. The ‘right to the city’ movement, based on Lefebvre (1996), illustrates that public spatial planning is also confronted by divergent interests. Naturally, conflicting interests are one basis for the emergence of problems.

At the level of the description of the components of innovativeness, therefore, a critical examination of the concept of ‘problem’ needs to be included. The concept of the ‘problem’ is used in particular to define the component of reflexivity. If it is assumed that problems are identified in terms of reflexivity, then it is already anticipated that certain occurrences will be classified as problems in a positivist sense. Because of this, speaking of ‘constructing’ or ‘inventing problems’ could be preferable. However, such an approach involves the danger of euphemizing problems, whether strictly physical ones such as hunger, or socially embedded ones like racial discrimination.

Drawing on Jaeggi’s (2014) explanations, we argue for using the term ‘noticing’ or ‘recognizing problems’ when talking about reflexivity. On the one hand, the practical philosopher describes problems as culturally specific and socially as well as historically formed. Hence, problems are ‘normatively pre-defined tasks and conflicts’ (ibid., p. 164, translated by the authors): issues become problematic with respect to an ethically pre-defined definition of what may (or may not) be problematic. Besides, problems have a history of attempts to solve them which influences their current interpretations as well as further attempts to find solutions (ibid.). On the other hand, problems are also objective and real: ‘We do not invent the problems, but react to them’ (ibid., p. 172, translated by the authors).

We are thus dealing with an ambivalent situation: problems derive from the world, but the world is constructed by the people who live in it. This means that problems are both factual and constructed (Jaeggi, 2014). There needs to be an interpretation for recognizing something as a problem, since problems are – despite their normative pre-definition – not undeniably problems (ibid.). A problem appears when (planned) courses of action get stuck, or when things one believed in are becoming inconsistent or unintelligible (ibid.). A reason arises to remedy this imbalance (ibid.). Referring to Dewey (2002), Jaeggi states that without its perception as a problem, it is not a problem and therefore cannot be solved: the fragmentation of a situation, its opacity, its ambivalence are the critical elements that identify it as a problem. It is precisely this identification of the problem that is the first step to solving it, as it leads to searching for a more detailed definition of the problem itself and an appropriate direction for its solution (Jaeggi, 2014). This approach is a realization of the two aspects of reflexivity (engaging with what exists and identifying problematic areas) in terms of innovativeness.

### 3.2 Social Innovations

The approach of an education for innovativeness aims at fostering ‘maturity’, in Adorno’s (1971) sense of the term. Thus, the approach must also be based on critical theory that points to contradictions within capitalist bourgeois society and suggests transformation, calling for political action that disrupts the status quo (Horkheimer, 1937; see also Schwandt, 2010). Thus, and in accordance with Scharf et al.’s (2019) remarks, the approach does not aim simply at

enabling people to invent trivial novelties, which do not seek to change society. Moreover, inventions which intentionally harm others, particularly minorities, cannot be considered innovations either.

Following this argumentation, then, the approach of an education for innovativeness must enable people ‘to liberate human beings from circumstances that enslave them’ (Horkheimer, 1982, p. 244, cited in van Bouwell, 2009), advancing ‘the abolition of social injustice’ (Horkheimer, 1982, p. 242; see also van Bouwel, 2009). A focus on social innovations could be the answer, as these aim to solve social problems (Hochgerner, 2009), improve society (Gillwald, 2000), affect the direction of social change, and achieve societal objectives (Zapf, 1994). According to Gillwald (2000), social innovations may also aim to better the lot of minorities, whereas purely technical innovations aim to benefit those who are already better off. Following Rammert (2010, p. 43, translated by the authors), social innovations are ‘new forms of participation and social integration, of balance of interests and solidarity’. Thus, they seem appropriate to respond to social challenges; and therefore they also fit the model design for innovativeness.

Social innovations are societal achievements, of a social, ecological, cultural or political nature, that improve on earlier solutions (Gillwald, 2000; see also Zapf, 1994). Fundamental characteristics of social innovations are their relative novelty in contrast to former practices, their diffusion, their stabilization, and their influence on the direction of social development (Gillwald, 2000). They are recognizable in different forms and in all social spheres as they can be organizational, structural/institutional or procedural (Merritt & Merritt, 1985), and can be aligned with those who are affected directly and those who are not (Ellwein, 1985). Social innovations can furthermore include technical innovations that have these same aims, and the two may in fact be mutually dependent on each other. For instance, the Reformation would not have happened without letterpress printing (Eisenstein, 1983). ‘[T]echnical innovations are [concrete] devices and social innovations [are abstract] acts of social change’ (Gillwald, 2000, p. 36, translated by the authors).

However, definitions of ‘social innovation’ vary a little (referring, for example, to solving social problems or improving society) and are fairly vague. It is unclear how to distinguish social innovations from other social changes (Gillwald, 2000), and most importantly to determine the essence of social benefit (Howaldt & Jacobsen, 2010; Rammert, 2010): the complexity of the consequences of changes makes it difficult to judge the improvement itself as there are differing interpretations of problems and of their solutions, and there are always negative side effects. Consequently – if there is to be a focus on social innovations within the innovativeness approach – the approach should itself include an adequate definition of social innovation derived from the research on social innovations.

### 3.3 Negative Side-Effects and the Power of Interpretation

In a bid to find a clear definition of ‘social innovation’, attempts were made to list what have been considered social innovations. The first list, by Ogburn (1933), included a great range of things from laws (e.g. minimum wages) or practices (e.g. quotas), to hate groups like the Ku Klux Klan (Gillwald, 2000). Such very harmful examples aside, there are novelties which represent both an improvement for one group and a worsening for another (*ibid.*), since people

have different interests (Deutsch, 1985). For example, whereas video surveillance in public spaces is used as a tool to protect people from thieving and muggings, people are put under general suspicion. Identifying a solution to a problem as the right, appropriate, one is dependent on perspectives and interpretation, especially when we assume the normative pre-definition of a problem (Jaeggi, 2014). Here, we are pointing to the ambivalent character of a problem as both constructed and real: reacting to unemployment by the creation of new jobs or introducing a statutory minimum wage are acts that depend on how we see the world (ibid.). Labelling ‘Fridays for Future’ as truancy or as mature and genuine participation is similarly dependent on our perspective.

Social innovations also have unintended side effects. The contraceptive pill, for instance, enabled women to pursue gainful employment and therefore independence, but at the same time it fostered their oppression because of pay inequalities with men, and because there seems to be very little interest in developing contraceptives for men: those male contraceptives that have been developed have negative side effects and have therefore not made it on to the market, though side effects are generally accepted in contraceptives for women (see e.g. Klemm, 2017). Wind turbines as an energy solution to help mitigate climate change also cause bird- and batstrikes (e.g. Traxler et al., 2004).<sup>5</sup> Moreover, the prohibition of exploitative child labour aimed at protecting children’s rights led companies to use child labour in areas (rural ones, for example) where child-protection laws were less vigorously enforced (see e.g. Küppers, 2012).

To sum up, when attempts are made to solve social problems, new problems arise, which can be classified into two types: (1) the negative side-effects that arise from solving problems through (social) innovations<sup>6</sup> (e.g. Heidbrink, 2010); and (2) questions of power: who will benefit from the innovation and who will lose out? Can ‘harmful and uneconomic solutions’ (Rogers & Kim, 1985, p. 88) be numbered among social innovations (see also Gillwald, 2000)? Introducing an ethical meta level should help, if not to solve then at least to discuss these problems.

### Handling Negative Side-Effects

Often, due to the pragmatic pressure to act and the scarcity of resources (e.g. Heidbrink, 2010), solving problems may cause new ones (see e.g. Gillwald, 2000). Sometimes, those side-effects can be anticipated, but often they are unpredictable because of the complexity of social causal relations (ibid.). The possibility of predicting unintended side-effects depends on the nature of people’s lack of knowledge (*Umwissen*) (Heidbrink, 2010). Using Wehling’s typology of a ‘sociology of ignorance’ (Wehling, 2006, pp. 109–46), for Heidbrink (2010) it is not a question of whether people lack knowledge, but of whether they are able to recognize this lack and influence it – in other words, whether they are able to turn ignorance (*Nichtwissen*) into uncertainty (*Ungewissheit*).

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<sup>5</sup> This example also highlights the charged relationship between social and technical innovations, i.e. the difficulty of defining them separately.

<sup>6</sup> The emergence of these negative side-effects gives rise to the question of responsibility (Heidbrink, 2010).

Following Heidbrink (2010), uncertainty means knowledge which is uncertain but knowable (*ungeniss*), whereas ignorance is a blind spot (*unsicher*). Ignorance has three dimensions: (a) knowledge of ignorance, (b) intention of ignorance, and (c) temporary stability. (a) Knowledge of ignorance means that one is able to identify what it is that one does not know ('specified ignorance'; Grove-White, 2001, pp. 470–71), or the ignorance goes totally unrecognized ('unknown unknowns'; *ibid.*) (Heidbrink, 2010). In this context, the Lacanian term 'unknown knowns' (Žižek, 2006, p. 52) also got to be taken into account as the 'things we don't know that we know' – which are precisely 'the Freudian unconscious [...], the disavowed beliefs and suppositions we are not even aware of adhering to ourselves, but which nonetheless determine our acts and feelings' (*ibid.*). Following Heidbrink's (2010) argumentation again, (b) ignorance can be involuntary, but it can also be intentional, for example by asserting the right not to know, maintaining taboos, or deliberately misinforming or misguiding others. (c) Ignorance can be temporary and therefore turned into an uncertainty ('reducible ignorance'; Faber & Proops (1994), pp. 116–17), or it can last indefinitely ('irreducible ignorance'; *ibid.*, pp. 118–19).

As a component of innovativeness, turning one's ignorance into uncertainty is part of reflexivity since it involves (re)thinking critically. Intended ignorance, therefore, is incommensurate with this ability, since reflexivity denies the possibility of maintaining one's ignorance: a person cannot be considered innovative if they act despite their knowledge of their ignorance. Therefore, an education for innovativeness needs to include enabling people to change their ignorance into uncertainty (by innovating actively), and/or not intentionally to misinform others (by innovating reactively).

Since the model design for innovativeness also names not-innovations as possible outcomes of an innovation process (Weis et al., 2017), it allows for the reworking of ideas and/or implementing strategies, which is also in accordance with Gillwald's (2000) remarks. In the approach of an education for innovativeness, one cannot be responsible for side-effects due to their unknown unknowns. However, the approach can allow reworking novelties (innovating actively) or at least suggesting rework on novelties (innovating reactively). This also highlights the general social component of innovation processes. Thus, it seems possible to minimize the probability of unintended side-effects, or at least to fix them in the aftermath, and consequently to act as responsibly as possible when innovating. However, we still have to ask the question of the power of interpretation – i.e. who is in charge of determining which knowledge needs to be known? How can the benefits of a novelty be determined when group interests conflict with each other?

### **The Power of Interpretation**

Following Heidbrink (2010) and Jaeggi (2014), it is not interests and power but norms that should determine the value of a solution. This can be done with the use of normative criteria (Thurnherr, 2000). For this, applied ethics may be useful, as they address practical problems in depth (see e.g. Fenner, 2010). Social ethics, which are part of applied ethics, develop overall principles or criteria in order to assess concrete actions or to question and possibly correct accepted norms, not at the level of an individual actor but on an institutional one (*ibid.*).



Nevertheless, the approaches of applied ethics are full of pitfalls. Gillwald (2000) suggests that a benefit to more than 50% of members of society should be the benchmark for referring to a social novelty as a social innovation. This, however, is a circular argument, because determining just what the threshold should be is itself determined by power. Moreover, such a suggestion again gives rise to the basic utilitarian basic problem that minorities can be harmed for the benefit of the majority (Rawls, 1972). Another approach is the systematization of moral dilemmas (Horster, 2013) in order to reduce complexity. In the end, one needs to examine which group's interest should be focused on and whose expertise should be seen as appropriate; but these do not answer the question of the power of interpretation. Such inductive bottom-up (practice-based) approaches do not seem fruitful, but neither do deductive top-down (theory-based) ones because of an over-hierarchization of theory which ignores the specificity of individual cases (Fenner, 2010). However, the need for a theoretical basis for acting ethically still exists. In order to evaluate the suitability of various theories of ethics for such a basis, Ott (1996) developed a list of criteria, namely: (i) simplicity, (ii) clarity, (iii) consistency, (iv) relevance in as many areas of practice as possible, (v) accordance with fundamental scientific and moral convictions<sup>7</sup>, and (vi) evidently reasoning (see also Fenner, 2010).

According to Ott (1996), discourse ethics, originated by Habermas and Apel, meet his criteria and therefore are the theory of choice for him (see also Fenner, 2010).<sup>8</sup> In this approach, a norm is legitimate when it is or can be accepted by all parties concerned. This will be negotiated in a real communication community. In order to find consensus, all parties concerned must participate in the discourse equally, without social coercion, as all must question their own arguments and stances critically and defer to the better argument. Those who are not able to speak for themselves (non-human sentient beings or those in a persistent vegetative state, for example) will be given a voice by others in the form of a representing discourse (Apel, 1973; Habermas, 1999; see also Fenner, 2010).

At first glance, this approach sounds fruitful, but if we take a closer look at power relations, it does not seem possible to free oneself from social coercion and power interests in communication processes (Heidbrink, 2010), including when speaking for minorities who cannot speak for themselves (Fenner, 2010). Not everybody upholds the rules of discourse outlined above. And even if they do, it is not always possible to find a consensus, since there are no established criteria for assessing the accuracy of arguments (Habermas, 1999).

Consequently, discourse ethics need additional theories in order to deal with heterogeneous groups and conflicting arguments (see e.g. Habermas, 1999). Ott (2001) therefore adopts argumentation theory, according to which valid arguments could be, for example, consequentialist (determining the value of an action according to the value of its consequences), or deontological (describing actions as good or bad despite their consequences, by the use of laws, prohibitions and overall principles, such as autonomy, human dignity or

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<sup>7</sup> However, assigning a normative value to a theory of ethics (i.e. because of normative convictions) seems to be a circular argument as well.

<sup>8</sup> Ott's (1996) criteria do nonetheless refer to discourse ethics, from which it is evident that these criteria fit the discourse ethics approach. Therefore, and due to Ott's questionable remarks on sea rescue (Hoang, 2018), his approach should be used with critical distance.

the categorical imperative (e.g. Fenner, 2010)). Nevertheless, deontological arguments risk disregarding the particular contexts of actions (ibid.), which would also not be in accordance with reflexivity. Therefore, deontological arguments should not be absolute, but relative (Fenner, 2008, cited in Fenner, 2010).

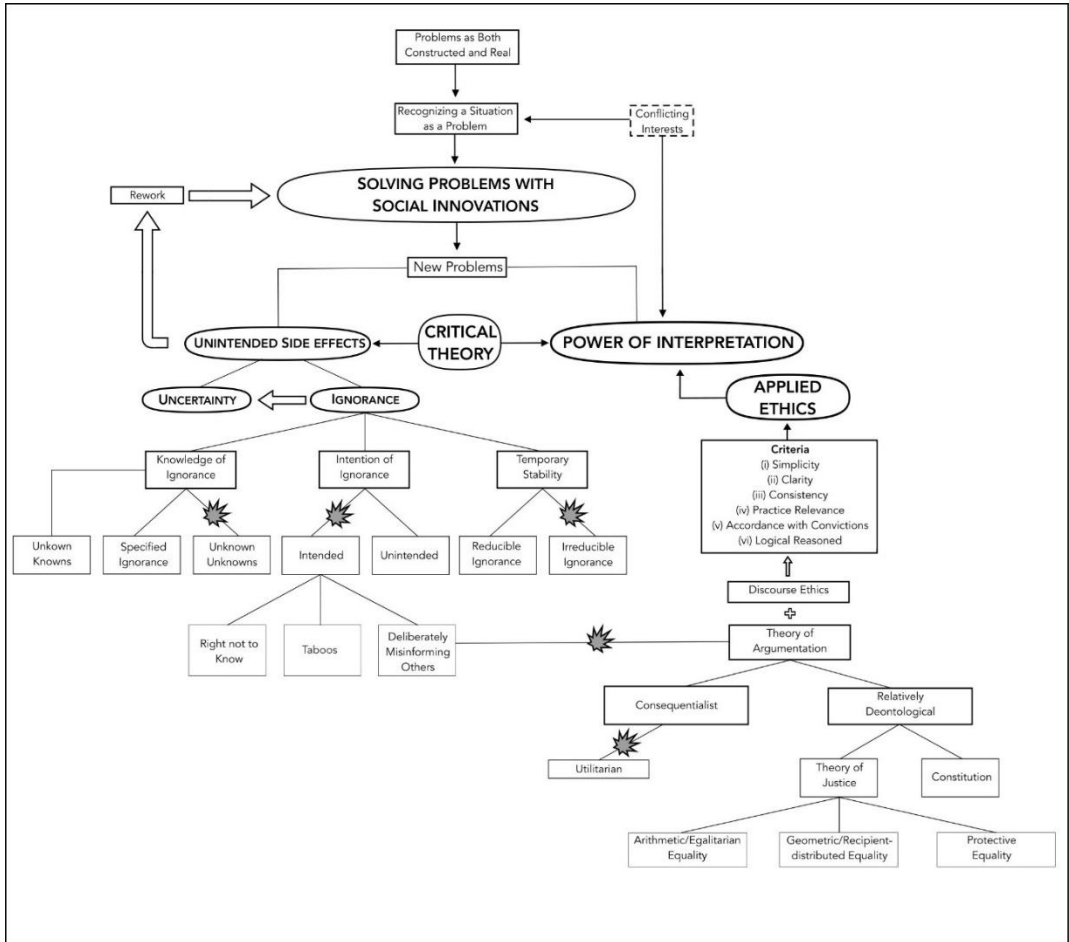
Following Fenner (2010), the ‘theory of justice’ (Rawls, 1972) also needs to be added as the highest moral principle.<sup>9</sup> To determine which aspects of equality are relevant when rating (in)equality, justice became typologized: (a) arithmetic/egalitarian equality means that everybody has the same rights; (b) geometric/recipient-distributed equality describes, for example, performance-related pay<sup>10</sup>; and (c) protective equality, which requires that weaker members of society are protected (ibid.). Utilitarian arguments (being part of consequentialist ones (Fenner, 2010)), cannot be in accordance with such an ethical meta level. Thus, and due to the deontological argument of the constitution as well as the basis of the critical theory, hate groups like the Ku Klux Klan cannot be a social innovation.

While Wehling’s (2006) ‘sociology of ignorance’ seems to be an appropriate basis for handling unintended side effects, discourse ethics, extended with argumentation theory and the ‘theory of justice’, may be a way to deal with the question of the power of interpretation. Hence, these theories may be of use in an initial attempt to develop an ethical meta level in the model design for innovativeness (Figure 2). However, we need to dig deeper into both the theories named so far and others, as we have only scratched the surface.

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<sup>9</sup> While Fenner (2010) describes the theory of justice as a theoretical addition to discourse ethics, along with argumentation theory, we would rather interpret the maxims of the theory of justice as deontological arguments themselves (see also Figure 2).

<sup>10</sup> This, too, involves a question of the power of interpretation, since jobs typically done by women, for example, are often considered to be worth less than jobs typically done by men.



**Figure 2:** An ethical meta level for the innovativeness model design (own research, based mainly on Jaeggi (2014), Heidbrink (2010), and Fenner (2010)) (draft).

## 4 Summary

The approach of an education for innovativeness aims to foster participation but does not limit the kind of participation (except for limiting it to being genuine). With this, ethical questions arise: how to deal with divergent definitions of a ‘problem’, and with negative side effects of innovations; how to define and control improvements brought about by innovations, taking into account the complexity of interests.

This paper has sought to develop an ethical meta level of the innovativeness approach in order to address these issues. In doing so, a range of theories were discussed. Using Jaeggi’s (2014) argumentation, the term ‘problem’ was defined as both constructed and real. Consequently, in the innovativeness approach reflexivity should include the ‘identification of problems’ and not their ‘construction’. Mainly with the help of Gillwald’s (2000) remarks, we touched on whether

a focus on social innovations could help to meet the requirements of the critical theory, and therefore whether focusing on social innovations could limit the definition of problems to social ones. However, using Jaeggi's (2014) definition of a problem, a focus on social innovations still leaves unanswered the questions of the negative side effects and the power of interpretation. Therefore, Heidbrink's remarks on uncertainty and ignorance (Heidbrink 2010, based on Wehling, 2006) were used to handle negative side effects and responsibility for them. Fenner's (2010) explanatory notes on applied ethics, referring mainly to Ott's (2001) criteria catalogue for discourse ethics by Habermas (1999) and Apel (1973), with additional argumentation theory and Rawl's (1972) 'theory of justice', were taken as a starting point for a possible basis for handling the question of the power of interpretation.

The innovativeness approach in general, and within this paper specifically, supports the aims of geomeia-based SPACIT. While SPACIT fosters the innovative potential of spatial participation using geomeia, this paper has deepened the understanding of reflexivity concerning spaces and the deconstruction of geomeia by providing a closer perspective on the term 'problem', for example as a starting point for counter-mapping. Furthermore, this paper has raised ethical issues that are of interest for those participating in spatial innovation processes. SPACIT aims mainly at enabling people to participate based on their own interests (e.g. by convincing others), though with a basis in fundamental human rights and basic democratic principles. However, the closer perspective on relevance, awareness of others' situations and harmful side effects discussed in this paper may constitute a complement for SPACIT. Practical applications might prove to what extent these theoretical insights could help in public participation processes, such as shaping cities innovatively to make them good places to live for all inhabitants.

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