INFORMING IN PARTICIPATION AS A ONE- OR TWO-WAY STREET?

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This contribution was originally made for the special session "IN-FORM-LAND".
IN-FORM-LAND was based — as is the European Landscape Convention (ELC) — on landscape values arising from practices "from the bottom" (civil society, 'people', public) instead of "from the top" (experts) as a way to reach sustainable and integrated landscape development. From this notion, IN-FORM-LAND derived a fundamental role for information and hence for media (in forming ideas, opinions, supporting choices) and "all those representation devices useful to make people aware of their cultural heritage, starting up participatory practices". (Participatory) GISs were mentioned as an example of the use of new technologies in "decision making about changes of landscapes", making it necessary to "find out communicative codes for people, not only for experts".

Although I agree with the intention of IN-FORM-LAND, I see a need to recognize the essential point that "making people aware" implies one-way (education-oriented) communication, whereas participation requires two-way communication. Two-way communication principally applies to every action and decision in a participatory project, be it in landscape or heritage research, landscape planning, or information, technology and media decisions and design.

Based on this recognition, I identify and discuss several issues. One issue relates to questions as reflected in participation ladders and typologies that categorize the involvement of entities and participants (including 'the people', 'the public', or citizens). Another issue is participatory knowledge and research, leading to a discussion of some main participatory research approaches and of concepts like experts and expertise. Information, communication and technology are a third issue, including consequences of taking GIS as the norm, as that may hinder genuine participation. Ethics, therefore, is at stake as well. Terminology is also an issue, as it often implies a certain perspective that may become reflected in actions, choices and information systems.

In order to discuss consequences of these issues with respect to information systems, I present some distinctions between information systems.

Participation, knowledge, information on landscape and heritage

In very broad terms, participation is a certain way of thinking and acting in the context of some activity on some subject. In this contribution the emphasis is on knowledge creation (as in research) and information/communication design (activities) applied to cultural landscapes and heritage (subject).

These particular contexts — as well as their mutual interactions — are captured with (1) participation as such; (2) research, knowledge and expertise on cultural landscape and heritage; (3) information, communication and related technologies.

Although generally participation is mostly discussed from the contexts of decision making, planning or design, they are not much of an issue here.

Participation is a much used but scarcely defined concept. It mostly is used as one sees fit for the (implicit or explicit) purpose at hand. Participation can be seen as a means to an end, but also as an end in itself. In the latter case it is an ethical stance from the citizens' fundamental and moral right (or even duty) to participate in decisions which affect their living space. In the former case the purpose is to come to (more) effectiveness, legitimization, and quality of the outcomes (e.g. Van den Brink *et al*., 2007).

As Wood (2010: 160) states, "Participation is not a complicated idea. Participation means "taking an active part in activities with others", and so "it is about taking one's portion, or about getting one's share. … Passive participation is oxymoronic". In practice, though, participation mainly relates to specific 'others' — not others in general — as seen from specific perspectives. In landscape history and heritage research, it means foremost the involvement of non-scientists or non-professionals, or 'laymen'. In decision making, spatial planning and design projects, it typically means the involvement of 'the public', 'local people', or 'citizens'. In both cases 'the others' encompass massive numbers of people, seen from the perspectives of a selective few (e.g. Basten, 2010). This makes purposes like 'making people aware' — and its inherent one-way and education-oriented communication — problematic from the start: many people are already aware, do have values and opinions, *and* may have knowledge ("local experts"). As Suškevičs &

Kűlvik (2011) contend, participation should be about common awareness, on both sides.

Participation in decision making, planning and design often is foremost related to people's values, opinions, preferences, and not to their knowledge, as project descriptions make clear (like in Jones & Stenseke (2011)). The European Landscape Convention (ELC, dating from 2000, although many countries ratified it much later) and its Explanatory Report (from 2003) may have contributed to that. In ELC documents, participation was originally just related to identification and assessment of landscapes as part of decision making, not to research and to knowledge other than from "lived experiences" (Jones & Stenseke (2011, 14, 15). As they put it, the intended methods and GISses showed "a very one-sided approach to public involvement". In the later ELC Guidelines from 2008 this has changed: "Participation implies two-way communication from experts and scientists to the population and vice versa. The population possesses empirical knowledge (local and naturalistic knowledge) that may be useful in completing and contextualizing specialist knowledge".

However, this still suggests a dichotomy between expert/scientist knowledge and local knowledge, and still puts experts/scientists and their knowledge perceptions central. This perspective perpetuates into information/communication and information systems. The Aarhus Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Issues actually showed this bias: "authorities share relevant information with the general public" and "public participation gives the authorities a better overview of problems as perceived by the public and allows the incorporation of the public's knowledge, values, viewpoints, and behavior in the decision making process" (Jones, 2011: 32). The authorities thus take the central stage and the public has to wait and see in the wings. Many participative

Ladder of citizen participation (Arnstein)	Participation ladder (Edelenbosch)	Kind of participation	Implicit perspective
Manipulation		Non-participation	
Therapy			
Informing	Inform	Non-interactive	'citizen participation'
Consultation	Consult		
Placation	Give advice		
Partnership	Co-produce	Interactive	
Delegated power	Co-decide		
Citizen control			'government participation'

Fig. 1. Some ladders and typologies in participation in spatial planning (adapted from Van den Brink et al., 2007, 39)

projects, therefore, may not be about "activities *with* others", but about giving input for activities performed *by* specific parties like authorities and scientists. Hence, for a genuinely participatory project, its very start (problem definition, criteria, etc.) and its final completion into information systems and documents need to be participatory as well (Van Paassen *et al.*, 2011; Russo & Watkins, 2007).

Projects by local people are called 'citizen (or community) initiatives'. Logically speaking this should lead to 'government participation'. As this term is hardly heard, 'participation' reflects a biased situation. Participation ladders (or typologies) reflect to which degree the participants are actually involved (Fig. 1, after Van den Brink *et al.*, 2007).

Knowledge may suffer the most, as in many cases *scientific* knowledge — the result of scientists working according to scientific standards and procedures — is the starting point. Suškevičs & Kűlvik (2011, 278) define knowledge as encompassing "cognitive fac-

tual information (e.g. scientific knowledge), as well as knowledge based on personal experience (e.g. local knowledge)". Personal experience is typically related to feelings, meanings, and values (see e.g. Michelin *et al.*, 2011, or contributions in Bloemers *et al.*, 2010). Although broadening the knowledge concept, the dichotomization is still present. Another problem is the implied difference between 'cognitive' and 'experience' in relation to knowledge, as knowledge research has shown that the two are essentially linked to each other.

The 'factual' aspect — very much related to information as in information systems and documents — is not that simple either. A building designated as a monument at some point in time may nowadays be seen as a fact, but is less so than facts like building materials, style, year, architect, etc. The designation is the result of a decision that may change. The actual facts do not change (unless they are proven to be wrong) and may grow in time with the knowledge

base. Hence, there are essential differences between heritage systems and landscape or building history systems, i.e. in types and broadness of knowledge. This influences choices about participation in knowledge and information systems (or at least should do so). Other (inherently participatory) aspects are about choices that will (or may or can) manage and control all this. For instance, can the local people manage and control their own contributions (Russo & Watkins, 2007; Wood, 2010)?

This last question is partly dependent on choices of technology. Taking GIS as the norm has several constraining effects. The typical (commercial) GIS is too complex, time consuming, and expensive for people other than authorities, scientists and experts, leading to ethical questions as well (Van den Brink *et al*., 2007). A GIS cannot handle all information types (including narratives, lived experiences, and imaginations), needs and forms either (Michelin *et al*., 2011; Lejano, 2008). Hence, both the information and the participatory aspect may turn out to be meager (Wood, 2010; Visser, 2010).

Several of these points are mentioned by Jung Wu & Isaksson (2008) in commenting on a Swedish planning project with participatory mapping. In this project, locals were involved for their lived experience and utility values but not for their knowledge (called 'knowledge values'). The authors concluded that this was a serious lack and that locals should be able to 'add things' and 'contribute with new data': "If so, there is also a need of clarification of the concept 'knowledge values' which could include expert knowledge and local knowledge." The confusion becomes also clear from for instance Caspersen (2009), who started from involvement of citizens with "interests in or knowledge about the local area", but ended up with the goal "to increase their knowledge of the landscape, which is a necessity for an increased awareness of landscape matters".

People, public(s), citizens and participation

As may be clear, the meaning of participation can be quite different, and so are the societal groups or persons involved.

A number of authors mention the problems inherent to terms like 'citizens', 'people' and 'public', as these terms refer to 'others' or 'them', i.e. everybody that is not 'us' ('us' being authorities, experts, professionals; e.g. Basten, 2010; Van Bommel, 2008). By doing so, they "are stripped from their academic, professional, governmental, personal (etc.) knowledge and experience", signifying a downgrading categorical way of thinking. Another problem is the inherent view of all those 'people' as a uniform mass instead of the many different groups the public actually consists of. For that reason some authors, like Basten (2010), prefer the term 'publics'. Participation, therefore, should start with asking who can (and want or need to) contribute on what, and in which way. This relates to all involved, including the experts/professionals (as meant in the concept of the 'reflective practioner') and authorities. Ideas like these imply a bottom-up approach and a two-way effect.

'Citizen initiatives' (see Fig. 1) are not without problems either, even if they are acknowledged by authorities (e.g. Pleijte *et al*., 2011; In 't Veld (Ed.), 2010). The initiatives may not be what the authorities were hoping for, while citizen groups experience problems in getting their issues and insights across to authorities and experts. As Zimmerman (2009) states, this is foremost a matter of different perspectives, expectations and frames of reference. Participation in this case would mean 'government participation', but this is anything but a common term.

Participative knowledge, research and expertise

Knowledge and expertise are complicated issues as well, both as such and from a participatory perspective. A main reason

for including local stakeholders is that researchers often miss knowledge on the specific localities (e.g. Van Paassen *et al.*, 2011). Choosing an appropriate approach for this collaborative or integrative knowledge creation is a main choice to be made. Two current major approaches are transdisciplinary research and participatory (action) research.

Transdisciplinary research

Transdisciplinary research is the participative member in the range of mono-, inter-/ multi- and transdisciplinary research. Some conceptions of transdisciplinarity do include participatory research, while others do not (Pohl, 2010). The term participation generally is mentioned only if local people are included. If that is not the case, the participating parties are foremost authorities, civil servants, organizational stakeholders, and/ or spatial planners and designers (like in Bloemers *et al*., 2010). But, as Van Paassen *et al*. (2011) comment, transdisciplinary research often actually concerns an intensified interdisciplinary form, based on the perspectives, values and norms of the initiators, sponsors and researchers.

Relating the level of participation to the use and purpose of knowledge — like enlightenment, decision making or negotiation (Zimmermann, 2009) — leads to transdisciplinary styles (In 't Veld, 2010). For instance, if enlightenment is the aim, co-producing is essential while consensus may be a bad thing. Participation also has consequences for the typical solution of boundary work in inter- and transdisciplinary research problems. It shifts the participatory questions to the boundary spanning, be it through shared concepts (e.g. 'landscape'), objects (models, visual designs, etc.), activities (as in 'social learning' or negotiation), or persons (In 't Veld, 2010; Van Paassen *et al.*, 2011).

Participatory (action) research

Participatory (action) research is a family of approaches with many varieties (e.g. Kindon *et al.,* 2007). They all combine inquiry with creating direct social change by means of active experiential and social learning. Some mainstream varieties are Action Research (AR), Participatory Action Research (PAR) and Participatory Research (PR) (Bell *et al.*, 2004). In PAR, the researcher and other parties share control, while in AR control foremost lies with the researcher and in PR with the other parties. Thus, PAR is more about co-producing knowledge and co-deciding than AR and PR. Examples of PR are the cases mentioned by Pleijte *et al*. (2011), in which civic groups asked researchers for help. The action research as applied in the Protection and Development of the Dutch Archaeological-Historical Landscape (PDL) scientific programme (Bloemers *et al.*, 2010) can be put at the other end of the continuum as the involved parties were authorities and landscape planners and designers (but hardly local people). Participatory ethics is a main issue, amongst others leading to reflection as an explicit and iterating step in the (P)AR cycle of "plan – act – observe – reflect".

Expertise and (non-)expert knowledge

Experts and laymen are another common but problematic distinction (Collins & Evans, 2007). Expertise in our society is typically related to science and training, which primarily are products of a specific institutional, cultural and historical context (Van Bommel, 2008). As many people actually have worthwhile knowledge, solutions have been sought in other concepts like 'cognitive communities', 'knowledge democracy' (In 't Veld, 2010), 'community science', or 'scientific literacy' (e.g. Lee & Roth, 2003). As Collins & Evans (2007) state, almost anybody acquires lots of expertise, although mostly of a ubiquitous and tacit nature. Formal training is just one way of acquiring expertise, as becomes

Expertise :	Ubiquitous tacit knowledge	⇔		Specialist tacit knowledge
	Beer-mat =>popular	=> primary	=> interactional	=> contributory
	knowledge understanding	source knowl.	expertise	expertise
Judging :	From external ⇔	Internal	(relative to the expertise)	
	ubiquitous => local	=> technical	=> downward	=> referred
	discrimination idem	connaisseur	discrimination	expertise
Based on :	*credentials*	*experience*	*track record*	

Making aware, ---------------- Participation ----------------- Professionals
'education'

Fig. 2. Levels of expertise and their relations to judgment and participation

clear from learning foreign languages. Starting from the common-sense criterion "Know what you are talking about", they developed a "periodic table of expertises" (shown simplified in Fig. 2). It shows degrees in 'expertise' ranging from "ubiquitous tacit knowledge" to "specialist tacit knowledge". 'Judging' distinguishes the grounds used for judging the expertises, like through credentials, experience, and track record.

This scheme is equally applicable to professional and local experts and non-experts. A professional expert supposedly is proficient in general disciplinary issues, but may lack the more detailed and variable knowledge in which the local expert may be more proficient. 'Local experience' is the minimum level for participation. People who need to be made aware have not reached that level yet.

Communication, information and technology

Information, communication and related technologies

In relation to participation both information and communication are an issue (e.g. Jacobson & Servaes, 1999; Kindon *et al.*, 2007). Although the concepts of information and communication are often used in-termingled, they are different. Information typically goes from one person (or machine) to another, while communication is seen as similar to exchange, interaction or dialogue. Furthermore, communication is active, while information is passive ("what is being exchanged") (Windahl *et al.*, 2009; Griffin, 2009). Both feature in a definition of information as "communicated knowledge", with knowledge as a broad concept that encompasses everything a person knows and is able to exchange (Visser, 2010).

Media and technologies influence what communication is or can be about. Participatory (Planning) GISs (PGIS or PPGIS) may be a solution, but only under certain conditions (Rambaldi *et al.*, 2006; Kindon *et al.*, 2007). Other media — including the so-called "social media" — are important to consider as well. However, these considerations are hardly an issue amongst, for instance, experts in cultural landscape and heritage researchers (Visser, 2010).

Within the communication field, there are a number of traditions and approaches, such as the transmission approach and semiotics (e.g. Griffin, 2009). Many (G)ISs typically start from the transmission tradition, looking upon the meaning and content of the message from their own perspective. Many

GISs on landscape and heritage typically are supply-driven, not demand-driven (Visser, 2010). Semiotics, being based on the (different) signification of something by different people, may help in this regard.

Two-way communication is a main issue in both communication and participation literature, for instance based on the viewpoint that irrespective of who performs the research, the results must be shared. Thus "participation in information' matters as much as "information in participation".

Two-way communication is an ethical issue as well. Habermas's well-known concept of "communicative action" may be helpful, as it did for instance in spatial planning (e.g. Jacobson & Servaes, 1999). This concept is related to the idea of an "ideal speech situation" based on "discourse ethics". In the (G) ISs fields ethics mostly comes forward in critical approaches, like in critical (G)IS science and in critical (digital) landscape or heritage approaches (e.g. Cameron & Kenderdine, 2007). An ethical appreciation of PPGIS can

be found in Rambaldi *et al.* (2006). A "social responsibility framework" may help in actions and choices with respect to maps and information systems (Visser, 2011).

Knowledge types and their relations to communication and technology

Knowledge can be categorized in many ways. Choosing which type(s) to include in a system can be decisive for the usability of a system, but is influenced by the technology (and vice versa).

Tacit knowledge, for instance, is difficult, if not impossible, to realize in a (G)IS. Explicit knowledge generally can, although dependent on type and technology (Boisot, 2007). Selecting knowledge for use in a GIS usually means narrowing down the knowledge types to, first formal knowledge (in abstract symbols, rules, and representations), then to codable knowledge (as in databases), and finally to what can be handled in geospatial tools (Fig. 3). Narratives, experiences and imaginations may be problematic within GISs, unless
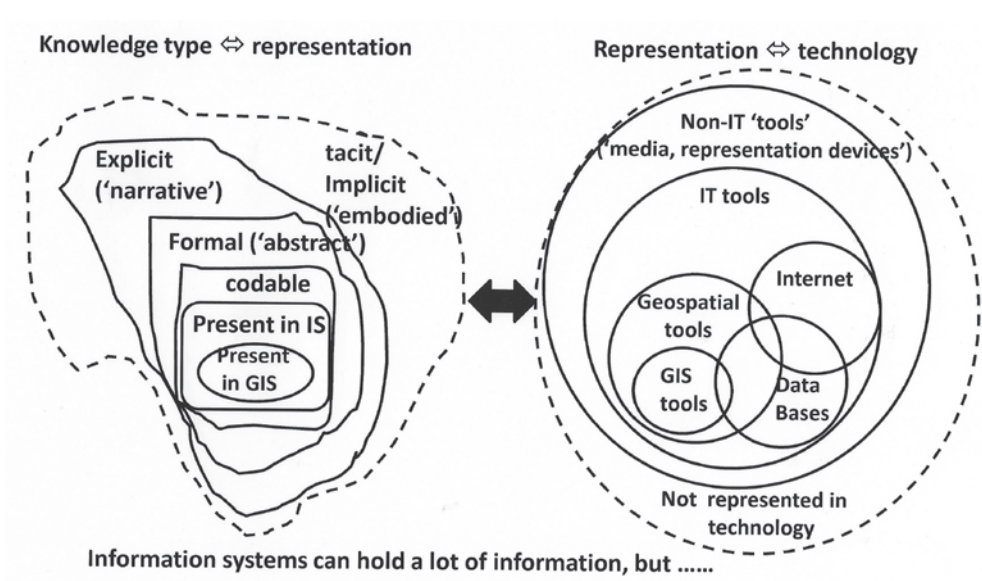

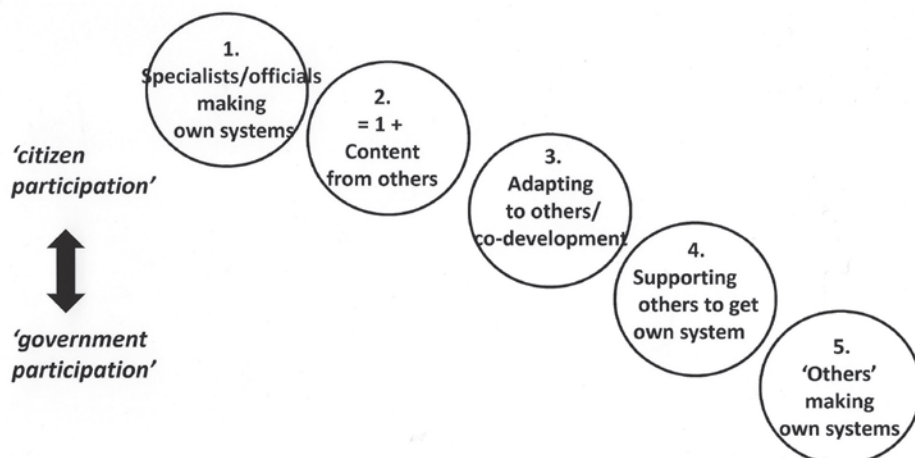*Fig. 3. Knowledge/information types and their relation to technologies*

Fig. 4. Participation levels in information systems, e.g. on landscape and heritage

translated into the type of information a GIS can handle, e.g. by categorizing (Sui, 2004). However, information may thus get lost.

Choices on what and how to include may lead to other constraints. Judging by their output, many GISs on landscape heritage center on the geographic locations, keeping other knowledge to a minimum (Visser, 2010). Other choices relate to information modeling (including categorizations), to human-computer interaction, and much more. All choices together determine for which use and users a system is useful and usable.

Applying the insights: distinctions between information systems

As mentioned before, actions and choices often become reflected in information systems (GIS, websites), books, reports, etc. (Visser, 2010). The result is a variation in information products and situations. This also works the other way around, as the existing information situation may influence actions and choices (including those on participation). Those interactions are discussed briefly based on two distinctions between information systems or situations.

The first distinction links different technologies and types of information to partici-pation levels (Fig. 4, see also Van den Brink *et al.*, 2007). This leads to differences between information systems in terms of who are involved, in which way and on which issues and activities. Categories 1 and 5 in Figure 4 are at the extremes, with complete realization by either specialists/officials (category 1, typically a GIS) or 'others' (category 5, typically non-GIS). As it appears, category 5 systems may stem from 'others' who experience unsatisfactory or unusable category 1 or 2 systems (Visser, 2010). In a category 2 system, 'others' can only add knowledge (and values) to systems designed, structured and controlled by experts/specialists. Category 3 is about co-producing a system. In category 4 specialists/officials support other people to realize their own systems, although some conditions may apply.

A system of one category may evolve into another category. The Dutch (GIS-based) national heritage system KICH (Knowledge Infrastructure Cultural Heritage), for instance, started in 2005 as a category 1 system and became a category 2 system in 2010 (www.kich.nl; Visser, 2010). On the other hand, knowledge from local (and regional) organizations and people in some *self-initiated* heritage projects, guided by a NGO,

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in the south-western part of the Netherlands ended up in this category 2 KICH system, thereby becoming managed and controlled by the NGO and the KICH experts. From an ethical viewpoint this is questionable in various respects, like taking over control of local knowledge from the locals, and the inherent suggestion that knowledge needs to be put into a GIS — preferably an official one — in order to be taken seriously.

The second distinction (see Figure 5, derived from Visser (2010)) builds upon differences in types and purposes of systems, e.g. between landscape or building *history* systems (as knowledge systems) and *heritage* systems (as decision making, planning and design systems). The knowledge systems typically grow over time and are largely project- and time-independent; hence, they diverge. The typical decision making and planning system — at least on landscape and heritage — aims at consensus and choices, and therefore, at convergence. Their knowledge content generally is selective, in comparison with the knowledge system(s), while

the recorded values, opinions, preferences as well as the choices are "a child of their time". Hence, participation in each system type relates to different subjects and aspects and to different social groups and parties. Knowledge systems, for instance, will be used for 'enlightenment' and searching, while in decision making systems negotiation and what-if questions are given a central position.

Conclusions

Participation has become an important issue in activities on cultural landscapes and heritage. However, scientists, experts and officials generally still hold the central position, seeing participation as something by 'others', while limiting the participation of 'people' or 'public(s)' to values, opinions, preferences, etc. and their knowledge to "lived experiences" as opposed to scientific knowledge. Local knowledge may actually be neglected upfront, as "making people aware" implies. This neglect and the concomitant dichotomization of knowledge are both core problems with respect to participation in information systems
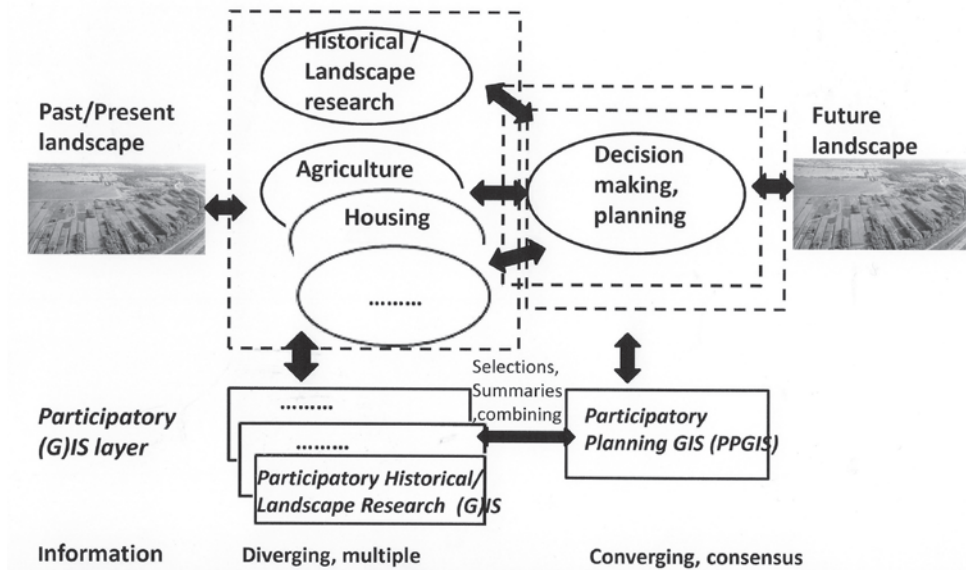

Fig. 5. Diverging versus converging systems in relation to purpose, situation and context

and knowledge creation. For instance, transdisciplinarity typically starts from a scientific perspective of knowledge. Participatory (action) research (PAR) approaches are more promising.

Other taken-for-granted but equally problematic perspectives relate to choices of technology and media. Taking GIS as the norm (like in PGISs or PPGISs) may actually hinder genuine participation and two-way communication, while the typical GIS is too complex, expensive and time-consuming for non-specialists. Hence, genuine participation — in knowledge, information systems, or otherwise — requires participation in all actions and choices, and in all steps and all respects.

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