

HOW HABERMAS' PHILOSOPHY CAN INSPIRE THE DESIGN OF INFORMATION SYSTEMS: THE CASE OF DESIGNING AN OPEN LEARNING PLATFORM FOR SOCIAL INTEGRATION

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Abstract: The notions of immigration and social integration have increasingly become central themes in public discourse, particularly in the European Union. Besides opportunities, this phenomenon also poses challenges to the host nations of promoting social integration of immigrants. Continuing an earlier Design Science Research project that developed an open learning platform for Civic Orientation in Sweden, this paper attempts to extend this platform using Jürgen Habermas' Theory of Communicative Action as an inspiration. We aim at designing a more inclusive open learning platform for social integration that supports instrumental, strategic, normatively-regulated, dramaturgical, and communicative action. We expect to further the relevance of philosophy in IS research by not only making sense of phenomena through philosophical lens, but also attaining inspirations from philosophy in designing sociotechnical information systems.

Keywords: social integration, immigration, Habermas, theory of communicative action, open learning platform, philosophy in IS.

“The social integration of people in modern societies is based on positive law, in other words, on explicit agreements which have to be negotiated between people”
(Huttunen & Heikkinen, 1998, p. 310)

1 Introduction

Most EU countries, especially those of the Schengen area, have recently faced the phenomenon of a large number of new immigrants and refugees (also referred to as *newcomers*) entering the countries. As a consequence, the notions of immigration and integration have become an overall hot topic in EU. A central challenge with large amount of immigration deals with the social integration of those immigrants who are permitted to stay in a country. The challenge is coupled with critical issues regarding the immigrants' quality of social life, and feeling of belongingness to a new country and society [1]. But in order to achieve social integration, the authorities are urged to identify and offer relevant discourses, which addresses and elaborate means for long term goals of integrating not only newcomers, but also current immigrants that have become socially segregated [2]. In Sweden, such discourses have been established for immigrants in general, and newcomers in particular. But in what ways have the discourses been established, and how do they incorporate a vision of strengthening the aspect of social integration?

When compared with the overall population of Scandinavia, Sweden has been one of the most generous European and Scandinavian countries to take in immigrants into Europe [3]. The generous intake has also brought consequences for a deficient social integration, which has led to parts of Sweden (e.g. Trollhättan, Göteborg, Malmö) being dominated by immigrants that haven't learned societal necessities such as norms, values, and the Swedish language [4]. As a response, the municipality of Gothenburg have together with authorities of west region in Sweden, established an ordinance to provide a civic orientation program for newcomers in Sweden. The ordinance was established in December 2010, with the objective to offer a learning discourse and to develop knowledge about: 1) human rights and fundamental democratic values; 2) the rights and obligations of the individual; 3) how society is organized in terms of laws, norms and values; 4), practical every day and social life in Sweden.

As a response to the governed ordinance and the growing interest, the University of West in Sweden started in 2013 an Action Design Research (ADR) project [5] with the idea to facilitate civic orientation through an Open Learning Platform (OLP). The OLP (called OLP 1.0) is today used by representative groups of actors from the municipality of Gothenburg. The actors are responsible for producing, maintaining, and distributing learning material for civic orientation both synchronously (e.g. face-to-face in an analogue or digital space) and asynchronously (e.g. e-learning, blended learning). OLP 1.0 has not only generated an instrumental value for enhancing and extending the notion of affording civic orientation to other regions in Sweden, but it has also generated research outcomes in terms of knowledge about designing information systems for societal learning such as civic orientation (for detailed descriptions about the project and it ADR-outcomes, please address the reference: [6], Haj-Bolouri et al., 2016, “An Information Systems Design Theory for Adaptable E-Learning”).

Experiences with OLP 1.0 led to an idea of extending it so that it does not only support civic orientation for newcomers, but also social integration of immigrants. When considering a new version of OLP 1.0 (called OLP 2.0), Jürgen Habermas' Theory of Communicative Action (TCA) and especially his typology of social action, might provide a useful inspirational framework to construct requirement for OLP 2.0 for two major reasons: firstly, we see that a typology of social action is relevant in two meanings in the context of social action, since we think that the society appears to immigrants as a complex phenomenon of social action, and social integration as a process is a form social action. Secondly, it has been claimed that Habermasian typology is a general, comprehensive and exhaustive typology of social action [7, p. 120].

Habermas has extensively been applied in the Information Systems (IS) literature [8, 9], but mostly to make sense of specific instances of information systems (e.g. office information systems, computer supported cooperative work, e-commerce, etc.). To our knowledge, besides Heng and De Moor [10] as the only exception, there are very few studies that have applied Habermas to design new information systems. Hence, the purpose of this paper is to outline how Habermas' typology of social action can be applied to inspire requirements construction in the case of an information system (OLP 2.0) for social integration of immigrants. Hence, we propose the following research question as a guiding point for the rest of this paper:

Research Question: *How can Habermas' typology of social action inform/inspire design and in particular, requirements construction of an information system for social integration of immigrants?*

The rest of this paper is composed as following: section 2 presents definitions on civic orientation and social integration. In section 2, we also present OLP 1.0, developed in the Swedish context and discuss some of its limitations. Section 3 introduces Habermas' TCA and typology of social action and their use in the IS literature. Section 4 presents OLP 2.0. Finally, section 5 presents and concluding discussion where we discuss the validity and reliability of our findings.

2 From the Open Learning Platform for Civic Orientation in Sweden to Social Integration

In this section, we will define civic orientation and social integration. We will also demarcate our definition of social integration into Asselin et al's [1] four dimensions of social integration. Finally, we will present the constitution of OLP 1.0 in terms of its architecture, content and affordances; we use the concept of functional affordances to describe how features and functions of OLP 1.0, can exhibit possible actions and afford possible engagements of actors (e.g. actors of OLP 1.0) to perform certain kinds of actions [11, 12]. In such format, we are not only interested in describing the properties of OLP 1.0, but also the acts or behaviours that are afforded or permitted by OLP 1.0. But before we elaborate upon the concept of functional affordances and OLP 1.0, we will first present the purpose and overall meaning with civic orientation.

2.1 Defining Civic Orientation in Scandinavia

Civic orientation is a rather fresh phenomenon in Scandinavia. Norway was the first country in Scandinavia to offer an informative civics program for newcomers. But Norway doesn't define their program as 'civic orientation'. Instead, they introduced various measures to achieve integration of immigrants into the Norwegian society. Their measures deal with the so-called "Introduction Act", which states that: "refugees, persons granted humanitarian status and persons who have collective protection are to be offered a two-year introductory programme, which includes Norwegian language training for newly arrived immigrants. This arrangement also applies to persons who immigrate to be reunited with their family members" [13].

Similar to Norway's Introduction Act, Sweden established a program in 2010 to offer civic orientation for newcomers and persons who immigrate to be reunited with their family members. The municipality of Gothenburg was the first municipality in Sweden to offer such a program. The civic orientation program is constituted through eight different themes that deals with topics such as how it is to live in Sweden, human obligations and rights, how it is to age in Sweden, the Swedish welfare, norms and values etc. The program is conducted and offered through newcomers' native language, where tutors act as the 'teachers' whom organizes the lectures and inform the newcomers in civic orientation. There are totally twenty lecture occasions, whereas the only criteria for receiving certificate for the program is to attend and be present at the lectures. The program is free from costs, but in order to register for the program, a newcomer must have permission from his/her supervisor at the employment center [14].

Because of the increasing throughput of newcomers in Sweden, the municipality of Gothenburg decided to digitalize the civic orientation program, by initiating an ADR project together with researchers from University West. The practical outcomes of the digitalization resulted into OLP 1.0, which we will describe in the next section.

2.2 The Open Learning Platform for Civic Orientation

The outcomes of digitalizing the civic orientation program have been reported in several previous published papers (15,16,17). Briefly described, OLP 1.0 and its underlying technology for civic orientation, is formed and established through formalized needs and requirements, affording learning content, system design and features for the following two main purposes:

- **Distribution and support:** the municipality of Gothenburg is the actor responsible for maintaining and distributing OLP 1.0. A group of clerks (e.g. administrators and coordinators) and tutors are responsible for organizing, planning and conducting teaching in civic orientation, both online and in classroom-settings. Clerks are also responsible for producing learning content for civic orientation. Hence, the first purpose with designing and intervening OLP 1.0 was to design, develop and introduce a framework of collaborative IT-tools, which support clerks and tutors with their local activities of organizing, planning and conducting their work in civic orientation.

- **Adaptable form of e-learning:** OLP 1.0 incorporates the functional affordances for developing and distributing online-learning material for the participants of the civic orientation program, which are the newcomers. The idea of providing civic orientation through an adaptable form of e-learning, means that the underlying information system comprises flexible design and functionality, which the clerks and tutors themselves can control to certain degrees. This notion of offering adaptable e-learning has been conceptualized and reported in terms of a design theory, with governing design principles for an underlying information systems for adaptable e-learning [6].

The two above formulated purposes have been realized through content and functionality, which provide functional affordances for different users of the platform (e.g. tutor, clerk, and newcomer). The functional affordances of OLP 1.0 can be summed up through the platforms functionalities and content. The platform provides several different features that afford a relationship between specific users of the platform and the users' potential actions. Markus & Silver [12] define such affordances as *functional affordances* based on the general concept of affordances deriving from Gibsons' [11] ecological psychology. We frame OLP 1.0's functional affordances through the following content and functionality:

- **Affording distribution and production:** the platform provides functionality for bridging levels of distribution and production of content. Clerks and tutors are afforded cloud-service features that allow them to collaborate, update and distribute content (e.g. books, slides, video-material, and images). Users with administrative roles, such as clerks and some of the tutors, have the possibility to regulate the level of content-availability (e.g. available for all groups of newcomers, available for a certain group of newcomers).
- **Affording use of content:** the platform provides functionality for organizing and implementing content, relevant for civic orientation. The content affords both a standardized and non-standardized structure. The standardized structure derives from formalized learning content, which is defined and established by the general civic orientation book [18]. The non-standardized content affords flexibility for clerks and tutors in terms of having the freedom of choosing and incorporating non-standardized content (e.g. embedded video-clips or images). For example, clerks have the ability to provide standardized learning content, which tutors can use for their lectures. But tutors alone also have the ability and rights to incorporate non-standardized content in different appropriate format. Such notion of flexibility affords a higher degree of adaptability for the users and their goals [6].
- **Affording rich interaction:** the platform provides a space for reciprocal actions and interactions, which inform and elucidate the *purpose* of learning civic orientation. Affording features allow tutors and newcomers to create a mutual space for reciprocal interaction, meaning that: tutors have the ability to use incorporated functionality to moderate lectures (e.g. online and non-online) and involve participants to rich dialogues regarding a certain topic of civic orientation (e.g. democracy). The dialogues can occur synchronously and asynchronously in the physical classroom, or dispersed in the digital classroom (e.g. through video-conferencing). But essentially, both the tutors and newcomers have the ability to establish an inviting atmosphere, which emphasizes the central meaning of civic orientation and inclusion of participants. Hence, the platform affords supporting features such as chat, instant online conferencing and cue-features that a tutor and/or participant can use to indicate attention for rich interaction.
- **Affording heterogeneous IT-literacy:** the platform provides features that support a large variation of IT-literacy among the users, especially the participants due to their heterogeneous identities and backgrounds. The features are therefore designed and implemented to support issues regarding translation of information, different level of engagement among participants (e.g. advanced participants, early participants, scholars, analphabets), and affording adaptability that clerks and tutors can employ to balance the content as suitable for different individuals and different types of individuals among the participants.

Overall, the functional affordances of OLP1.0 constitute the possibilities of fulfilling different types of goals, depending on whom the user is. For example, clerks such as administrators and content producers, have the intentions of using the platform for uploading learning content to the cloud and then embed the content as a picture or document into an instantiated course-site (e.g. for Persian participants, or Arabic participants). Tutors on the other hand, will use the embedded content before and during their lectures as a supporting feature for their lectures. But the tutors can also embed their own specific content. Therefore, the platform affords possibilities for mutual and individual user goals and intentions, which is incorporated through supporting content and functionality for civic orientation, and in a recent paper [17], we have illustrated the technical architecture together with the functionality through different layers (shown in Fig 1). Fig 1 depicts, that OLP1.0 consists of four different layers and two major technologies. The layers comprise features for general information about the

civic orientation program, news through RSS-feeds and a translation feature for translating information on the page. Other layers concern the presentation layer, content layer and production layer. Cloud-services, blogging tools, and other services for production, content and presentation support each and every layer. Furthermore, each layer addresses a certain group of actors (e.g. clerks, tutors, newcomers), which interact with appropriate features, depending on their intentions and responsibilities with using OLP1.0.

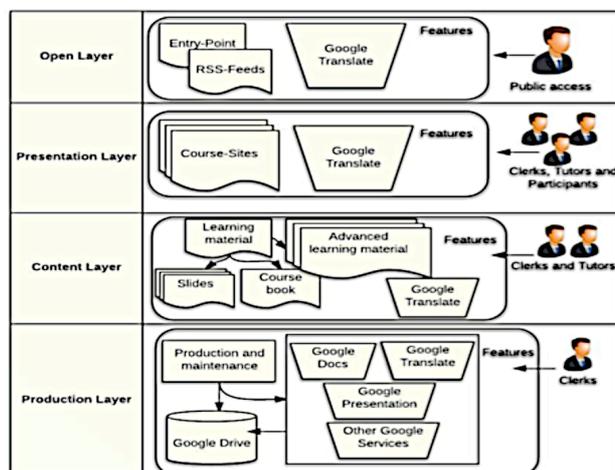


Fig 1. Schematic of system layers for OLP 1.0 (Haj-Bolouri et al., 2015)

The current version of the OLP1.0 has its limitations from the viewpoint of social integration that is usually defined as an on-going dynamic process of adopting the norms, values and customs of the affording society and incorporating immigrants in the job market (see Section 2.3). OLP1.0 is restrained to learning the basics of civic orientation for newcomers, but not affording possibilities for further integration into a society. From the viewpoint of social integration the content of OLP1.0 is too limited to objective facts about the Swedish society, without sufficient attention to the social and subjective worlds [19]. Furthermore, OLP1.0 was targeted to civic orientation for newcomers only, while social integration concerns immigrants who are not necessarily newcomers. Finally, the functional affordances provided to newcomers were quite limited in OLP1.0. They were mainly seen as content consumers than content creators. We see that social integration requires a more communicative approach in the spirit of Habermas' theory of communicative action.

2.3 Defining Social Integration

Social integration can generally be defined as an on-going dynamic process, which refers to incorporation of immigrants in the job market, and adoption of norms, values and customs of the affording society [20,21]. Specifically it is "the process in which people and their activities become intertwined in social life and form mutual interdependent relations of some form and to a certain degree" [1, p. 138]. Social integration extends the concepts of acculturation and assimilation, as it broadens the one-sided perspective on how immigrants adjust themselves to fit into their new social environment provided by both concepts. The one-sidedness provides an incomplete picture of the immigration phenomenon, as "the truth is that the large numbers of immigrants [...] have cause significant changes in their receiving societies" [1, p. 137]. The dimensions of social integration are [22][1]:

- **Acculturation** refers to the acquisition, development, and mutual transmission of knowledge and competences, and the degree and way in which these are variably distributed in the social environment.
- **Positioning** refers to the process of occupying different positions in society, and of gaining, maintaining, defending or losing access to resources that are relevant for the position of an individual or a group.
- **Interaction** comprises different intensity, emotive content, institutional context, social environment, formal or informal communication, intra- versus intergroup character, individual and collective exchanges, gender make-up, and contacts across or within generations.

- **Identification** encompasses acts and feelings of belonging, representational process and mutual stereotyping (individually and collectively).

Importantly, these authors share to some extent Habermas' ideas of different typology of social action, as they also put an emphasis on different levels of behaviours or actions as follows [22][1]: "purposeful behaviour of individuals, collective behaviour between and within formal and informal groups, and the "invisible hand" of institutional developments that often transgress the horizons of the life-world of individuals and face-to-face groups". We will elaborate on these points in Section 4, where we will draw upon Habermas' [19] TCA and Asselin et al's [1] dimensions of social integration in identifying functional affordances for OLP 2.0. In the section that follows we will provide a brief overview of how Habermas' TCA has been used in IS research and conclude with a proposal to move towards prospective philosophizing to inspire the design of IS to fulfil certain goals in certain contexts.

3 Habermas' Theory of Communicative Action in IS Research

In this section we will provide a concise overview on previous IS research that applied TCA. As TCA represents a general theory of communication and has been applied to understand social implications of IS development, implementation, and use, it is beyond the scope of this paper to review TCA's applications in the IS field in-depth and, hence, we limit our discussion to a few of TCA's major contributions. We will then also present briefly the main essence of Habermasian typology of action, which will be applied in Section 4.

3.1 Prior research

Habermas' philosophy has been of considerable interest in IS research since the mid 1980's [24]. It has inspired the so-called critical paradigm in IS research [8] and it has been applied to understand different IT applications. It is beyond the scope of this paper to review the applications of Habermas' philosophy in the IS field or even of critical social theory in general (for a more detailed review see [8]. Instead, our goal is to apply his typology of social action in the requirements construction for an open learning platform to support social integration.

Habermasian typology of social action has been applied in several studies such as Lyytinen & Hirschheim, 1991 [25], Janson et al., 2000 [26], and Janson & Cecez-Kecmanovic [27] to make sense of different IT applications. With Janson et al. (2000) as an exception, the other referred scholars do not apply the whole repertoire of types of social action suggested by Habermas. Notwithstanding their contributions, their studies have mainly applied TCA to make sense of the development and use of the specific application. Furthermore, to our knowledge, besides Heng and De Moor [10] as the only exception, there are very few studies that have applied Habermas to design new IT applications. Here we try to partition these various manners into two approaches: making sense through philosophy and philosophy-inspired design process, as depicted in Table 1.

Table 1. Making sense through philosophy and philosophy-inspired design process

Categories	Making Sense through Philosophy	Philosophy-Inspired Design Process
Main activities	Reflecting upon or analyzing established information systems using certain philosophical works.	Using certain philosophical works as the foundation for identifying requirements and generating design principles in designing information systems.
Point of departure	Existing artifacts, sociotechnical phenomena, previous research, existing conceptual models	Sociotechnical phenomena, problems to be solved, philosophical works
Position of Philosophy	A posteriori (informed by design/ use case)	A priori (informing design)
Outcomes	Conceptual models, justifications/ validations	Requirements, design principles
Examples	Janson, et al. [26], Janson & Cecez-Kecmanovic [27]	Heng and De Moor [10]

Making sense through philosophy encompasses the attempts to use philosophical lens or theories in order to reflect upon and analyze – in short, to make sense of – already established information systems artifacts or phenomena that involves the use of IS in organization or society such as computer supported work [28], computer-mediated communication [29], e-commerce [27] and IS development [30,31,32,33]. In making sense through philosophy, we start from existing artifacts, sociotechnical phenomena, previous research, or existing conceptual models and apply philosophy in an a posteriori manner in order to arrive at resulting conceptual models or even justifications of the existing ones. In this case, philosophizing is therefore informed by design of IS or the use of IS. Several examples [30,31,32][29] are the studies that discussed how information systems could support various action types. Such studies agree on the usefulness of action-based analyses in identifying how information systems can support those actions in certain context. Additionally, they theorize on how information systems enabled effective – or ideal – communication.

On the other hand, philosophy-inspired design process applies philosophy at the beginning of the inquiry as a foundation in the attempts to identify requirements and generate design principles in the process of designing information systems. Consequently, philosophy informs design and philosophizing occurs in an a priori manner. An example of this endeavour is the study by Heng and De Moor [10] (see also [34]), where the authors identified conditions and requirements to be fulfilled for communicative actions to occur in Habermasian ideal speech situations and then generate several design principles. In doing so, they drew heavily on theory of communicative action and illustrated their analyses with the case of GRASS – a web-based Group Report Authoring Support System. They described their endeavour as “an information systems exercise that contributes to the validation of Habermasian theory” (p. 332).

Through his cognitive-affective model of organizational communication, Te'eni [35] sought to transform the - at that time - existing segregated models of communication that focused only on particular aspects of communication – for instance only on its cognitive aspects, its media, or its messages and proposed “a model of user behaviour for guiding design needs to satisfy several conditions” (p. 252), therefore implied its potential contributions to requirements process in designing IS. Finally, Ross and Chiasson [9] also applied TCA in their reconceptualization of the requirements process in designing IS. Even though they also explored other works, Habermas' TCA persisted to be the center in their analyses and propositions. They went on to put forward a set of conditions that underlie TCA-inspired requirements process: 1) participation by all; 2) time and space for opinion formation; 3) time and space for will formation; and 4) separating legislation, application, and implementation (see pp. 134-135). We will adopt and adapt some of these assumptions and conditions when identifying the requirements for our learning platform for social integration.

3.2 Habermasian Typology of Social Action

According to TCA [19][36], there are two modes of action in the world based on the rationality or orientation. Oriented towards achieving instrumental goal or success, on the one hand, one can either influence objects or external world through instrumental action, or influence other people through strategic action. On the other hand, one can aim towards reaching an agreement based on mutual respect and understanding through communicative action. Both strategic and communicative actions occur in social situation, whereas instrumental action takes place in non-social situation. This typology of social action has been found useful to analyse the use of IS in organizations and society, as illustrated in the previous section.

Similar consideration on different kinds of actions was also expressed by Asselin, et al. [1] when elaborating on different levels of actions involved in the process of social integration: “purposeful behaviour of individuals, collective behaviour between and within formal and informal groups, and the “invisible hand” of institutional development”. Purposeful behaviour corresponds to TCA's actions with success orientation, while collective behaviour to those that occur in social situation. The invisible hand of institutional development can be interpreted in terms of norms and values that are agreed upon in society. Assigning them to different lifeworlds as proposed by Habermas, can also approach these levels of social integration. Applied to the context of social integration and society in general, the lifeworld “reproduces the culture, social integration and processes of socialization necessary to the continuation of society” [37, p. 269].

TCA suggests three worlds which are united in everyday life: *the objective world*, dealing with facts, *the social world*, dealing with norms and values, and *the subjective world*, dealing with beliefs, feelings and hopes [19][36]. The lifeworld “forms the horizon of processes of reaching understanding in which participants agree upon or discuss something in the one objective world, in their common social world or in a given subjective world” [19, p. 131]. According to him, instrumental, strategic, and communicative actions occur in the objective world, whereas normatively-regulated action takes place in the social world, and dramaturgical action in the

subjective world. We do not interpret Habermas dogmatically, but we interpret that strategic action is also associated with the social world (it is a form of social action as usually understood). Similarly, dramaturgical action is also associated with the social world – in representing culture, for instance. In the next section we will apply Habermasian typology of social action to the dimensions of social integration, the result of which will inspire us in designing OLP 2.0 for social integration.

4 Habermasian Inspiration in Designing an Open Learning Platform for Social Integration

We approach social integration as both process and goal, in and towards which communication plays an indispensable role. As Huttunen and Heikkinen [38, p. 310] stated, “the social integration of people in modern societies is based on positive law, in other words, on explicit agreements which have to be negotiated between people“. Naturally, this takes place following the democracy in which the majority rules, but it is important that minorities such as different immigrant communities get the voice expressed so that the majority can take them into consideration in their decisions. Such negotiation for explicit agreements can be elaborated as social actions that use language as medium to reach either certain instrumental goal or for the actors to harmonize their understanding and action plan. This approach perfectly outlines Habermas' TCA. Likewise, communication is also the basis of social learning [37]. We intend OLP 2.0 for social integration to support social learning, even though individuals are also enabled to express themselves and create their own contents. Against this backdrop, view social integration based on typology of social action and provide illustration each social action to be afforded by OLP 2.0.

4.1 Typology of Social Action in Social Integration

Sumner (2000) argued that, even though TCA is based on direct and face to face verbal communication, internet supported written and asynchronous communication can also be explained as a communicative action, especially since it supports reflection, critical thinking, cognitive development, and problem solving. This argument concerns the importance of creating an ideal speech situation by supporting communicative action. However, social integration consists not only of communicative actions. Given its dimensions as proposed by Asselin, et al. [1] and action orientation in general as proposed by TCA, we can identify the types of social action of each dimension of social integration and devise a typology of social action for social integration. Table 2 portrays this typology of social action.

We use action orientation instead of action situation for this typology based on the assumption that social integration occurs in social environment [1]. An exception is given to the acculturation dimension, where immigrants can acquire certain knowledge or cultural attributes. In this case, they exercise influence on objects, not on other people. Taking into account the objective, social, and subjective worlds, we can explain that acculturation, positioning, interaction, and identification may occur in different lifeworlds. In what follows, we will illustrate each type of social action in the context of social integration.

Table 2. Typology of social action for social integration based on action orientation

Dimensions	Oriented to success	Oriented to reaching understanding
Acculturation	Instrumental action	Normatively regulated action, <i>dramaturgical action</i>
Positioning	Strategic action	Normatively regulated action
Interaction		Communicative action
Identification		Dramaturgical action

4.2 Affording Instrumental Action in Social Integration

Instrumental action occurs when actors seek to reach goals in an efficient fashion employing predictions drawn from physical and behavioural models. Of the four dimensions of social integration, acculturation can take the form of instrumental action. In this case, immigrants seek to acquire certain cultural attributes of Swedish cultures as the first step to operate in their new society. Learning Swedish as a foreign language is an example of the instrumental aspect of acculturation, in which immigrants assert influence over non-social object (language as knowledge or ability) in order to be able to do everyday activities in Sweden. Obtaining subscription for

public transportation or simply purchasing tickets from ticket vending machines that follow Swedish standards and regulations is another example of instrumental acculturation. OLP 2.0 for social integration can support instrumental action – and therefore instrumental acculturation – by providing various practical instructions and hints about how to get everyday things done in Sweden. The functional affordances can be manifested through functionalities that allow immigrants to pose questions about practical life aspects in Sweden. The system may have master users who attempt to provide answers to them, thus expanding the repertoire of instructions along the increase of systems use.

4.3 Affording Strategic Action in Social Integration

Strategic action occurs when an actor, while assessing the expected results of his action, takes into account the action of his counterpart(s). The function of speech in strategic action is influencing one's opposite number and it is usually judged through its effectiveness in achieving the targeted ends or goals. In social integration, strategic action can manifest in positioning, where immigrants seek to “occupy different positions in society, and of gaining, maintaining, defending or losing access to resources that are relevant for the position of an individual or a group” [1, p. 139]. On the other hand, strategic action often has certain connotation – bribing, for instance. In the context of social learning, we thus focus mainly on the reduction of unwanted strategic action. Consequently, the nature of positioning as social action is moved towards conformity to the established norms in Sweden (see normatively regulated action). OLP 2.0 for social integration can support avoiding unwanted strategic actions – therefore promoting positive positioning through normatively regulated action – by providing materials that enable learning through experience. Against bargaining habits, for instance, OLP 2.0 can provide stories and movies that demonstrate various reactions of Swedish inhabitants towards the act of bargaining. The same applies to the act of bribing public authorities – OLP 2.0 enables immigrants to vicariously experience and therefore understand the negative consequences of bribing without having to follow trial and error manner in real life.

4.4 Affording Normatively Regulated Action in Social Integration

Normatively regulated action refers to members of social groups whose actions are informed by commonly accepted norms. In normatively regulated action, speech plays a role in establishment of interpersonal relations. The validity of normatively regulated action is claimed through its rightness – as to whether it conforms to the established norms. Normatively regulation action manifests in two dimensions of social integration: acculturation and positioning. Through knowing, understanding, and conforming to established values and norms in Sweden, immigrants are expected to be able to position themselves well and eventually occupy acceptable or even desirable position in their new society. Furthermore, they can also potentially fulfil the relational approach to acculturation – not only do immigrants acquire Swedish cultural attributes, but they can also integrate their own cultural attributes into Swedish society. This process can flow smoothly if they do so within the boundaries of established Swedish norms. OLP 2.0 for social integration can support learning about normatively regulated action in parallel to avoiding unwanted strategic action – such as the examples of bribing and bargaining previously described. Materials will be presented in multimedia and interactive way to support experiential and social learning.

4.5 Affording Dramaturgical Action in Social Integration

Dramaturgical action is the presentation of self in a public forum - the idea of dramaturgical action may be extended to cover “dramaturgical action” between an organization and its audience and society and its “audience” (such as immigrants). In dramaturgical action, communication serves the purpose of self-representation and its validity can therefore only be judged based on subjective criteria (sincerity). Dramaturgical action in social integration manifests especially in the acculturation and identification dimensions. We believe that dramaturgical action is particularly relevant when providing deeper insights into Swedish culture and society than a set of established norms and values. Culture typically includes aspects that are difficult or impossible to express in words, since they are so self-evident for culture bearers that they cannot easily recognize them and still less to express them in words.

Representation of self includes impression management and other expressional aspects in daily encounters – ranging from selection of clothes and food preferences to even the knowledge about table manners and aspects of “Swedishness” that may be considered novel or strange to the foreign eyes. Furthermore, OLP 2.0 also enables

immigrants to experience different situations that portray clashes among cultures (between foreign and Swedish cultures and even among various foreign cultures) and how to overcome them.

4.6 Affording Communicative Action in Social Integration

Communicative action is oriented to mutual understanding between actors who aim to achieve their goals by developing an inter-subjective interpretation of a situation as the basis for coordinating individual action plans. The actors referring to all three worlds accomplish this; that is, making claims concerning the objective world (truthfulness), the social world (right or legitimate), and their individual subjective worlds (sincerity) [19][36]. OLP 2.0 can support communicative action between several actor groups. A key aspect of communicative action is the process of raising, questioning and defending validity claims at the discursive level. To be effective in this regard the discursive process should free from power distortions, approximating the ideal speech situation [27]. For this purpose, we can borrow Heng and De Moor's [10, p. 341] guidelines: 1) provide an open forum to all interested persons and groups who have access to the Internet; 2) facilitate the discourse, which is assumed by the editor(s); 3) discourage the editor(s) from developing the position into a power base or structure; 4) produce a neutral and transparent document to report all the undistorted views of all the participants of the discussion; 5) provide some mechanism of ensuring and for the participants to take on responsibility; 6) seek understanding and where possible true consensus rather than contrived conclusions.

OLP 2.0 can support communicative and discursive action between several actor groups. Most importantly, it can be a forum in which members of each immigrant community can discuss challenges of different aspects of social integration (e.g. culture clashes) in Sweden and form a consensus view as far as possible for dealing with them. It can also be a platform between the immigrant communities and the Swedish authorities, which address immigration issues. Additionally, OLP 2.0 for social integration will provide material in at least three languages (native language of the immigrant community, Swedish, and English), introduce the role of moderators in order to prevent inappropriate material, and be presented in different formats and versions for different communities based on their cultural preferences (e.g. color schemes, text direction, symbols).

5 Concluding Remarks

We began this paper by asking the question of: how Habermas' typology of social action can inform or inspire the design of IS and at the same time what are required for a web-based open learning platform to afford social integration of immigrants? Our question led us to look at how previous IS-scholars have used Habermas' typology for IS-research. Through previous research, we found out that there are two categories for using philosophy as a medium for IS-research in general, and IS-design in particular (see Table 1). In our case, our ambitions for this paper suits well into the second category, where we have described and illustrated how Habermas' typology can be used for conceptualizing tentative design proposals, in terms of an open learning platform for supporting and promoting social integration. We based our proposal on our previous research outcomes in terms of designing and developing an open learning platform for civic orientation [15][17]. We extended the idea and now propose, for further research, to design an open learning platform that employs Habermas' typology and provides functional affordances, which supports and promotes social integration of immigrants. Hence, we set it as our goal to extend the previous works and aim to enhance philosophizing in inspiring IS design process, and therefore, we formulate our overall contribution through the following points:

- We emphasize not only on enabling communicative action, but also on the context where such action occurs. In doing so, we distinguish between goals (social integration of immigrants), means to achieve goals (web-based open learning platform) in our design endeavor.
- Even though we reflect on the previous version of the learning platform (OLP 1.0), our philosophizing occurs in a prospective manner. As such, we attempt to arrive at an improved version of the learning platform (OLP 2.0) with the inspiration from Habermas' TCA.
- We identify requirements through functional affordances that encompass which social actions are to be afforded by OLP 2.0. Consequently, we further previous scholarly attempts to design systems that enable ideal speech situation and paying attention to specific social actions that we need to afford through the design of IS.

To our limitation, we haven't designed and evaluated any prototype for OLP 2.0. However, we see our limitation as an opportunity to establish a further understanding towards how our defined OLP 2.0 can be designed and

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intervened into a society, as we did with OLP 1.0. But unlike OLP 1.0, our enhanced version is defined to incorporate a broader perspective of lifeworlds, where immigrants may not only use/apply the content of the platform, but also provide content through authentic interaction with other immigrants and natives. One way of employing such a notion would be to implement OLP 2.0 as a virtual reality. Such reality could incorporate Habermas' [19][36] three worlds, afford his typology and adopt Asselin et al's [1] dimensions for social integration. Immigrants could then not only learn how the society is constituted in terms of its objective rules and/or social norms and values, but also create an added value for other immigrants (or community of immigrants) and natives by sharing and introducing their own personal experiences and perceptions through dramaturgical actions. They could also address and learn how dimensions such as acculturation, positioning and interaction are manifested into the society, through processes of trial-and-error. Such possibility would afford a sense of freedom towards doing mistakes in a virtual world, instead of the real world, where the consequences of the immigrants' virtual actions would enhance their sense making towards societally and culturally motivated activities. Furthermore, interaction in the virtual reality would afford communicative action in terms of providing an open space, where immigrants can develop an inter-subjective interpretation of situations and individual perceptions. They would basically be afforded with a wider discourse, than the one provided in OLP 1.0, and be encouraged to participate as contributing actors of the virtual reality. In other words, immigrants could not only learn and trained in how to get socially integrated, but they could also bring their experiences into account, by sharing them with other native avatars, and therefore create an inter-subjective reality that mutually interplays with the different embedded worlds (objective, social and subjective). But at the same time, being only in a virtual world would create a distance between the non-virtual world and social integration of immigrants. However, the virtual world is only a tentative suggestion on how our conceptualization of OLP 2.0 could be realized and utilized.

Another aspect that we would bring into account through an implementation of OLP 2.0, is the aspect of employing an socio-technical design science research approach, where we could pack and un-pack our platform in terms of an information systems artefact [39]. This aspect is however not fully defined, but we could employ it by conducting an (similar for OLP 1.0) ADR-project, which emphasizes stages of problem definition, building, reflection and learning, and formalizing research outcomes in terms of design principles and/or theories (Sein et al., 2011). Doing so, we could also formalize the platform into an information systems artefact, and describe its relevance and rigor through an already specified terminology that supports ideas for innovative IS-research [5][39]. We believe that philosophy serves an inspiration for employing ideas and notions that are not only fruitful for making sense of already existing phenomenon in IS-research, but also for designing and creating new information systems that serve emerging phenomenon for further research through rigorous design research methodologies such as ADR. We hope that our brief contribution in this paper may inspire other IS-scholars to employ philosophy (e.g. Habermas' philosophy) and conduct IS-research with focus on designing innovative and purposeful information systems for the society and the individuals of the society in general and social integration in particular.

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