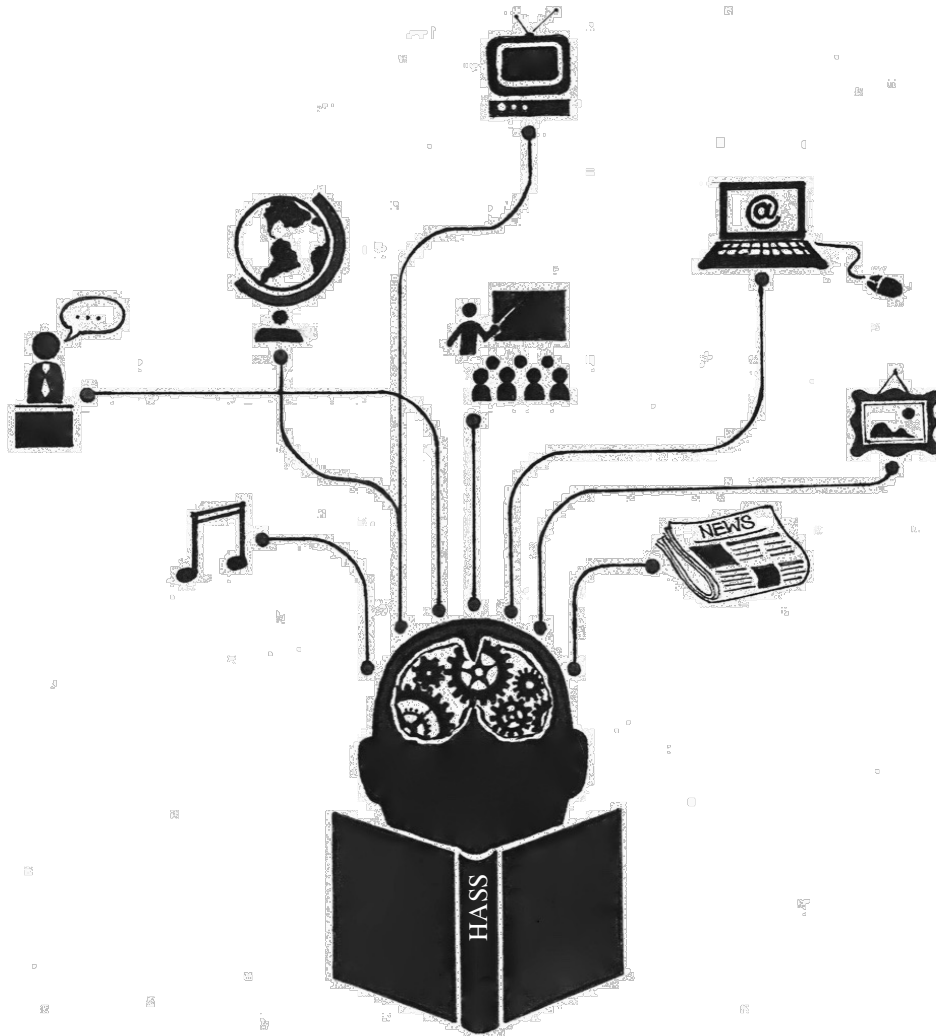


What drives valorisation in the Humanities, Arts and Social Sciences?



Name: Laurent Lokhorst
Email: laurentlokhorst@gmail.com
Date: 02-12-2016
Supervisor: prof. dr. E. Moors
Second reader: dr. F. van Rijnsoever

Abstract

Driven by neo-liberalism, universities are increasingly expected to contribute to society in the last decennia. In the Netherlands, *valorisation* is the term that politics have introduced to capture this new responsibility. Valorisation is defined by the ministry of Education, Culture and Science as ‘the process of creating value from knowledge, by making knowledge suitable or available for economic or social use and to translate to (competing) products, services, processes and new activity’ (Interdepartementale Programmadirectie Kennis en Innovatie, 2009, p8). However, the term has suffered from a limited economic interpretation, both by policy makers and researchers. Literature has stressed the skewed policy attention and the consequential undervaluing of the Humanities, Arts and Social Sciences (HASS). Simultaneously, several sources find that HASS valorisation is abundant. This poses a paradox. The current study aims to illuminate this paradox by assessing how and why HASS valorisation emerges in the Netherlands. The results show that HASS is abundant in non-commercial valorisation, both in quantity and in societal impact. Nevertheless, the economic discourse in which valorisation is framed does have negative consequences for HASS, like a lack of practical support, less funding and a negative reputation of valorisation among researchers. Moreover, the economic focus could affect the integrity of science in general, by demanding short-term solutions and results. Therefore, in the future, attention should be paid by policy makers and researchers to clarify and broaden the definition of valorisation. This includes building a more comprehensive understanding of how HASS valorisation contributes to society and incorporate this understanding into science and valorisation policy.

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1 Introduction

1.1 Problem description and research question

The demand from society for academic knowledge has increased during the last decennia (Benneworth & Jongbloed, 2009; Philpott et al., 2011). The rising complexity of society (AWTI, 2012) and the increasing importance of knowledge in the economy (CBS, 2009; Etzkowitz, 2000; Scott, 1997) are two of the main reasons driving this demand. The Dutch government has captured the obligation for universities and knowledge organizations to contribute to this societal demand in the law (Wet op HOWO, 2016, Artikel 1.3; Wet op NWO, 2016, Artikel 3). The term that is used by the Dutch government for this societal engagement is *valorisation* (De Jong, 2015). The following definition is held by the Dutch government since 2009:

‘Knowledge valorisation is the process of creating value from knowledge, by making knowledge suitable or available for economic or social use and to translate to (competing) products, services, processes and new activity.’ (Interdepartementale Programmadiirectie Kennis en Innovatie, 2009, p8).

In contrast to the broad economic *and* societal value creation that the valorisation policy intends, the term valorisation seems to suffer from a limited interpretation, both among researchers and (economic) policy makers, that tends towards commercialization (i.e. contributing economic value) (Rathenau Institute, 2016a). This trend has resulted in an overemphasis on Science, Technology, Engineering and Mathematics (STEM) valorisation, while undervaluing valorisation in the Humanities, Arts and Social Sciences (HASS) (Benneworth & Jongbloed, 2009; Olmos-Peñuela et al., 2014a; Olmos-Peñuela et al., 2014b; Philpott et al., 2011). In the context of this study, undervaluing is understood as less attention from policy makers, less funding for valorisation, and a consequential impairment of enthusiasm for valorisation among HASS researchers.

It is therefore striking to consider a study by the Centre for Business Research at the University of Cambridge, which shows that, when taking a wider view (i.e. not only focusing on traditional valorisation indicators, like patents, licences and spin-outs), HASS is actually involved in valorisation in many ways (CBR, 2011). Another study found that HASS researchers are not less engaged in valorisation activities than STEM researchers (Thema Hoger Onderwijs, 2015). Additionally, an exploratory interview previous to this study revealed that valorisation activities in HASS in the Netherlands were actually plentiful (personal communication T. Altena and P. Tuinenburg, Februari 9, 2016). These notions pose a paradox; On the one hand, HASS seems to be undervalued in valorisation, on the other hand HASS valorisation is abundant. This raises the question why and how HASS valorisation emerges, despite its undervaluing being stressed in academic literature.

This study aims to elucidate this paradox by uncovering the process of HASS valorisation. Thereby it can reveal barriers as well as strengths of HASS valorisation and hence whether, and on what aspects, HASS valorisation is undervalued or not. The study focuses only on HASS disciplines in the Netherlands, because the Dutch science system is one of the leading

systems concerning valorisation worldwide (De Jong, 2015) and should therefore be a promising source to obtain rich information. The main question of this research is:

Why and how does valorisation in the Humanities, Arts and Social Sciences in the Netherlands emerge?

To answer this question, a comprehensive framework by Ward et al. (2009) is used, that conceptualizes the process of academic knowledge transfer. Although the terms valorisation and knowledge transfer are sometimes used interchangeably in literature (Rathenau Institute, 2016b; VSNU, 2016b), some distinctions can be identified. Valorisation is more abstract, is sometimes used in terms of an outcome rather than a process (Hermans & Castiaux, 2007), concerns mainly academic knowledge and is used in Dutch policy (De Jong, 2015). In contrast, knowledge transfer is more concrete, extensively used in scientific literature (Geuna & Muscio, 2009; Ward et al., 2009) and hence provides a practical approach in examining the actual process that leads up to valorisation. The framework about knowledge transfer by Ward et al. (2009) enables to gather diverse information about all aspects of knowledge transfer and also emphasizes the less visible aspects of this process, which might be important in elucidating why and how valorisation emerges in HASS. Thus, for practical reasons, this study defines knowledge transfer as a process, and valorisation as the social or economic value that results from this process.

1.2 Theoretical relevance

The main theoretical contribution of this research is to explain the paradox posed above. Thus, to provide an answer to the question why and how HASS valorisation emerges, despite the fact that it is undervalued by policy makers and has less funding opportunities. Previous studies often started from a problem based perspective on HASS valorisation, trying to resolve a problem rather than seeking for the strengths of HASS valorisation (e.g. Benneworth & Jongbloed, 2009; Cherney, 2015; Philpott et al., 2011). By assessing not only the problems, but also the strengths of HASS valorisation, this study is an addition to previous research. Another important theoretical contribution of this study is to provide empirical evidence to test and refine the framework of Ward et al. (2009). As Ward et al. (2009) state, the framework is analytically and empirically 'empty' (p7) and needs empirical testing and refinement by case studies (Ward et al., 2009). This study uses Ward's framework to build theoretical understanding about the HASS knowledge transfer process, thereby simultaneously enriching the framework with analytical and empirical content.

1.3 Societal relevance

The Dutch Advisory Council for Technology and Innovation (AWTI) has published several reports stressing the importance of valorisation of HASS (AWTI 2012; AWTI 2014a). According to the AWTI, societal challenges can not be solved merely through technological development. HASS knowledge is suggested to have different qualities than STEM knowledge (KNAW, 2011, Philpott et al., 2011), that complement STEM knowledge to settle in society and help to tackle the grand societal challenges, such as population ageing (AWTI, 2012; AWTI, 2014a; Netspar, 2014). Moreover, HASS disciplines provide (system)knowledge that can help address societal issues like health, education, mobility, spatial planning, the financial system and public administration (AWTI 2012; AWTI, 2014a; KNAW, 2011). This study provides insight in the validity of the undervaluing of HASS described in literature and

hence whether more attention should be paid to HASS valorisation by universities and the government. Furthermore, it illuminates the process of HASS valorisation, which can be used by policy makers as a map to improve and encourage HASS valorisation.

This research report is structured as follows. First, the theory section gives a broad discussion of literature on valorisation in HASS as well as an elaboration of the framework of Ward et al. (2009). Then, the method section describes which research approaches and data analysis methods are used. Thereafter, the results section gives a comprehensive summary of all findings from the data. Then, the conclusion gives an answer to the main question. Finally, a discussion reflects on the methodology, on the applicability of the conceptual framework of Ward et al. (2009), on the implications for knowledge transfer theory and concludes the thesis with a number of practical and policy implications.

2 Theory

2.1 Theoretical background

Scholars have emphasized the problems of HASS valorisation and have criticized the skewed focus of universities and politics towards STEM valorisation. Several reasons are adduced that explain the undervaluing of HASS valorisation. One of the most important ones seems to be the way in which valorisation is understood. Benneworth and Jongbloed (2009) argue that there exists an over-emphasis on commercial valorisation because the term is framed in the discourse of academic capitalism, which prefers private benefits over public. They argue that valorisation models are relatively simple and based on capitalistic successes. However, these models are not applicable to HASS since benefits of knowledge from HASS are more diffuse and less easily enumerated and capitalized (Benneworth & Jongbloed, 2009). Olmos-Peñuela et al. (2014a) argue that because of the informal way in which valorisation in HASS happens, valorisation stays 'under the radar' (p14). Moreover, beneficiaries of HASS valorisation are often public or non-profit organisations with low purchasing power (Benneworth & Jongbloed, 2009). Similarly, Philpott et al. (2011) argue that there is a tendency toward the 'hard' entrepreneurial aspects of valorisation, like spin-off creation, patenting and science parks, whereas the softer aspects, like consulting and producing highly qualified graduates are undervalued. This poses a problem for HASS, since its knowledge is often not of direct value to the industry and does not fit well within the entrepreneurial paradigm. The capitalistic tendency is not restricted to the university. Olmos-Peñuela et al (2014a) argue that a consensus is shared in a wide set of policy communities that STEM is far more socially valuable than HASS.

The capitalistic discourse is disadvantageous for HASS valorisation. Philpott et al. (2011) argue that a top-down push by university boards on academics may put them under pressure to pursue 'hard' valorisation, which makes them feel disadvantaged since this activity is not likely to be successful. As a result, the entrepreneurial paradigm has created an increasing divide between disciplines that are successful in commercial valorisation and those that are not. This causes 'fear and lack of understanding within the academic community' which 'has the potential to create resistance to change and to stifle progress towards the entrepreneurial mission' (Philpott et al., 2011, p168). De Jong (2015) also found that valorisation suffers from a limited interpretation, which is aimed at short-term economical benefits and neglects societal debate and policy development. This caused that the valorisation policy lacks understanding and a shared vision among researchers, which consequently led to distrust in the valorisation policy by researchers.

The fact that HASS knowledge is less easily capitalized does not mean it is less valuable to society. HASS knowledge is 'conceptual and symbolic' (Olmos-Peñuela et al., 2014b, p4), which means that it may contribute to general enlightenment and legitimizing ideas and opinions (Olmos-Peñuela et al., 2014b). As such, it is suitable to, for example, contribute to societal debates or help legitimizing industrial or governmental policy. Furthermore, HASS is associated with system knowledge and contributes to problems in societal systems (AWTI 2012; AWTI, 2014a; KNAW, 2011). Therefore, HASS knowledge is valuable to governmental organizations involved in societal systems like health and education. Likewise, HASS is reported to be strong in community-based, people-based and problem-solving activities

(CBR, 2011). HASS knowledge has also been suggested to be valuable to firms' management processes (Olmos-Peñuela et al., 2014b; Philpott et al., 2011) by 'redesigning business models, optimizing supply chains or identifying consumer behaviour' (Philpott et al., 2009, p166). Olmos-Peñuela et al. (2014) summarize the most common valorisation channels in the social science and humanities from a literature inquiry: consultancy, contract research, joint research, training and personnel mobility.

Also the motivation of HASS researchers for valorisation seems not to lack behind that of STEM researchers. A study by the Brussels Study Institute (BSI) found that there are no differences in involvement in valorisation activities between researchers from the STEM and HASS (Thema Hoger Onderwijs, 2015). Instead, the differences lie in the type of valorisation. They found that HASS researchers are involved in social valorisation (advisory, seminar contribution, workshops) rather than economic valorisation (product development, intervention activities).

To sum up, there exists a general understanding that valorisation is similar to commercialization of knowledge, which causes the undervaluing of HASS valorisation. Nevertheless, HASS knowledge is valuable to society and seems to happen in numerous, often less visible, ways. However, since HASS valorisation is harder to measure and therefore less visible (Olmos-Peñuela et al., 2014a; Olmos-Peñuela et al. 2014b; Philpott et al., 2011), it is unclear why and how HASS valorisation emerges and to what extent HASS valorisation suffers from the capitalistic discourse. A broad and comprehensive analysis of valorisation in HASS is needed to elucidate this issue. Chapter 2.2 proposes a framework for analysis.

2.2 Framework for knowledge transfer

A knowledge transfer framework by Ward et al. (2009) is used to uncover the process of HASS valorisation. Ward et al. (2009) aim to 'move away from narrow descriptions of knowledge transfer towards a broader sociological explanation of the process' (Ward et al., 2009, p3). Therefore, the model fits the exploratory nature of the current study. Ward's framework is the result of an extensive literature study on 9522 scientific articles that entailed concepts explaining (parts of) the knowledge transfer process between 'academic and practice settings' (Ward et al., 2009, p2). The literature search was conducted in health, medicine and in two HASS disciplines, namely education and sociology. After a thorough selection procedure, Ward et al. (2009) end up with 28 articles that represented the most important and repetitive features of knowledge transfer found in the literature. From these articles, five major components of the knowledge transfer process were identified: analysis of context, problem identification and communication, knowledge development and selection, knowledge transfer activities and interventions and knowledge utilization. Each component is discussed below. The components and important concepts (written in *italics*) associated with them, are the basis for the operationalization in table 1 in the method section.

2.2.1 Analysis of context

The context in which valorisation takes place can be interpreted widely. Contextual factors are *organizational alignment* with valorisation and the organizational readiness for change (Jacobson et al., 2004; Olmos-Peñuela et al., 2015; Ward et al., 2009). Furthermore, *individual factors* seem important, like previous experience in entrepreneurial activities and

academic identity (Olmos-Peñuela et al., 2015). Also, *disciplinary environment and norms* have been reported to influence valorisation (Olmos-Peñuela et al. 2015). Finally, *characteristics of the research group*, like group leaders' status and a large research group size- and multidisciplinary are suggested to enhance knowledge transfer (Olmos-Peñuela, 2014b).

2.2.2 Problem identification and communication

The *start of the problem identification* of a societal problem happens in different ways. It may emerge from 'a system of communication and interaction between decision makers and researchers' (Ward et al., 2009, p5), or through established *communication channels* between user and researchers (Ward et al, 2009). Communication can be formal or informal, HASS being more likely to be engaged in the latter (Olmos-Peñuela et al., 2012). In any case, all models in Ward et al. (2009) showed that the identification of a problem appeared from the knowledge users and not from the researchers (Ward et al., 2009). Nevertheless, *previous experience* with research that had external influences makes researchers more likely to frame their research in a usable way (Olmos-Peñuela et al., 2015).

2.2.3 Knowledge development and selection

The type of knowledge that is produced also has an influence on valorisation. Valorisation depends on the relative advantage and complexity of the knowledge and its *compatibility* with 'pre-existing beliefs, systems and organizational norms' (Ward et al., 2009, p5). Some studies argue that aligning research to user needs helps valorisation, while others argue it is the inherent *knowledge characteristics* that affect the possibilities for valorisation of that knowledge (Ward et al., 2009).

2.2.4 Knowledge transfer activities and interventions

Knowledge transfer is the actual action in which knowledge is transferred to society. Ward et al. (2009) discern two different types: *distribution*, which is a push-driven distribution of knowledge (e.g. marketing and the use of local champions), and *linkage*, which has a more substantive character (e.g. interaction, dialogue and the use of intermediaries) (Cherney, 2015). Some actions are also called interventions, because they are purposively employed to urge transfer of knowledge into society (Ward et al., 2009).

2.2.5 Knowledge utilization

Finally, the knowledge has to be actually used to be valuable to society. This utilization is often described by discussing different *valorisation activities*, like seminars, consultancy or spin-offs (Philpott et al., 2011). However, it can also be described by the *type of use*, which entail conceptual use (e.g. changed understanding), political use (supporting policy measures) or instrumental use (making/contributing to a product) (Cherney, 2015; Olmos-Peñuela et al., 2014b; Ward et al. 2009). Utilization can also be described by the actions associated with utilization, like *assessing the impact* of knowledge (Ward et al., 2009).

2.3 Conceptual model

From the five components described above, a conceptual framework can be constructed. According to Ward et al. (2009) the components might occur simultaneously, more than once and in no specific order. Also, a certain valorisation process does not necessarily pass through each of the components. However, each component plays an important role in knowledge transfer (Ward et al., 2009). As discussed in the introduction, this study

interprets valorisation as an outcome and knowledge transfer as the process that precedes this outcome. Each knowledge transfer component may therefore partly explain the valorisation outcome. In this line of thinking, a conceptual model is constructed (figure 1). The current situation of each component and its contribution to valorisation in HASS is examined thoroughly.

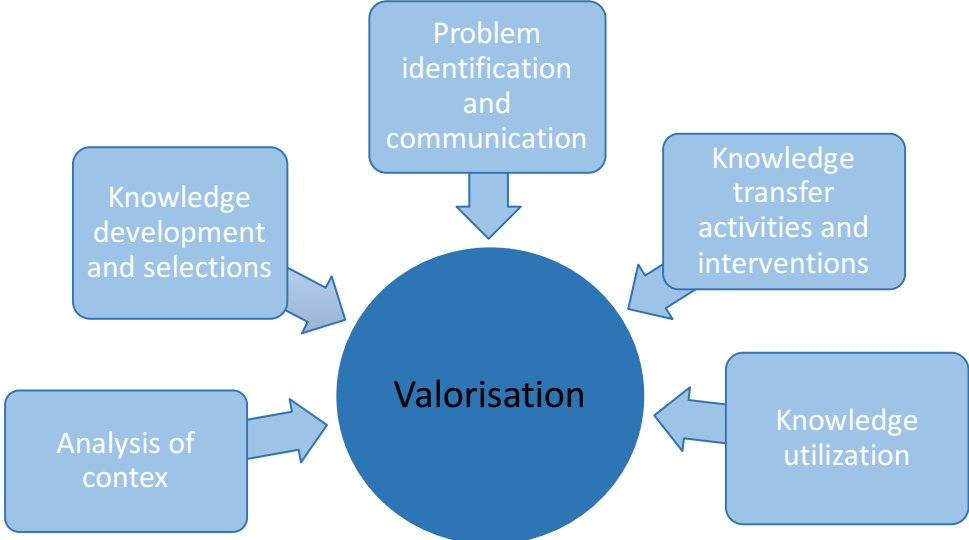


Figure 1. Conceptual model: The five components of the knowledge transfer process as described by Ward (2009) as contributors to valorisation.

3 Methods

3.1 Research design

This study aims to find out why and how HASS valorisation emerges. Since it searches for explanatory mechanisms and aims to build theoretical understanding of this process, this study employs an inductive approach. Furthermore, given the exploratory nature of the research, rich and in-depth knowledge about the valorisation process in HASS is needed, which is best obtained through qualitative data (Bryman, 2012). This study uses interviews as the major source of data. Using a qualitative approach comes with more benefits to this study. First, since valorisation in HASS is not easily measurable and quantifiable (Olmos-Peñuela et al., 2014a), qualitative information could reveal more in-depth insights about the knowledge transfer process than quantitative data. Also, interview data enables to find personal values, beliefs and motivations, which are important in the researcher's choice to pursue valorisation activities (Lam, 2011).

The case study is the most appropriate research approach for understanding processes and studying 'how' and 'why' questions (De Jong, 2015; Hessels, 2008, Yin, 2012). Since these questions are both contained within the main question, the case study is highly suitable for this study. More specifically, case studies are appropriate for describing, exploring and explaining a phenomenon (Yin, 2012). Given inductive approach of this study, exploration is an essential part of the research process. From this exploration, the framework by Ward et al. (2009) is enriched with theoretical content that describes and explains the entire knowledge transfer process and its contribution to valorisation in HASS. The theoretical content is built through an iterative process, with a constant comparison of the data and the emerging concepts, in which the emerging concepts steer the search for new data (Bryman, 2012).

3.2 Case selection

This study employs an embedded case study design (Yin, 2012). That is, a holistic case that embeds one or more sub-cases, which are exemplars of this case. According to Yin (2012), this design is appropriate to study a case at a holistic level, but simultaneously allowing to retrieve more concrete lower-level information from embedded sub-cases within that case. This design is appropriate for this study since examining valorisation in HASS as a whole provides information about holistic processes regarding valorisation that are relevant for most or all HASS disciplines, like policies and organizational conditions. However, exploring this holistic level alone might ignore important lower level processes, like individual valorisation practices, perceptions of valorisation and discipline specific aspects that influence valorisation. This information can be retrieved from relevant sub-cases.

This study treats HASS in the Netherlands as a holistic case, and includes two sub-cases that reveal more specific information about HASS. In order to obtain the most accurate picture of valorisation in HASS, the choice for disciplines is steered by the aim to find disciplines that are representative for HASS as a whole (Bryman, 2012). Sociology and philosophy are chosen as representative cases for studying HASS valorisation, for two reasons. First, they are large disciplines, both represented in 8 of the 9 general Dutch universities. Therefore, they have the potential to provide varied and rich information about valorisation processes. Second,

they are historical disciplines, which means that valorisation processes and activities have had enough time to be established and develop in a rich and varied way.

The resulting case study design used in this study is pictured in figure 2. Although the holistic case and the sub-cases aim for complementary information, it is likely that they also overlap in certain area's. Overlapping is also likely to happen between the two sub-cases, since similar topics are likely to play a role for researchers in both disciplines. Hence, the two subcases and the holistic case triangulate each other by confirming or refining each other's results, which increases the robustness of the results and its generalizability to other HASS disciplines (Yin, 2003).

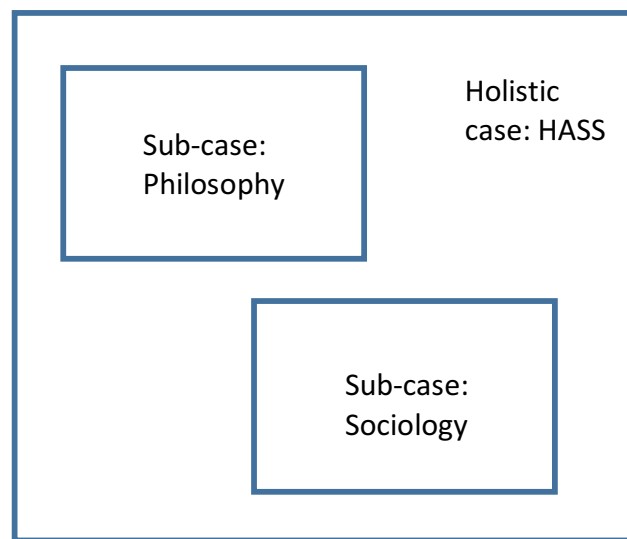


Figure 2. Embedded case study design used in this study.

3.3 Operationalization

Table 1 shows the operationalization that formed the basis for the interview. Most of the concepts are derived from the description of the theoretical components by Ward et al. (2009), and additional literature (chapter 2.2). Furthermore, three concepts are developed on the basis of the theoretical background of HASS valorisation (chapter 2.1). The operationalization table is intended rather to help gather rich information, than to be a decisive framework with strictly defined concepts. Interview questions are aimed to get the richest possible answer about a concept from an interviewee. Therefore, questions are often open, or interviewees are asked for further explanation of their answer. During the research, the interview was adjusted according to newly emerging topics or irrelevant questions. The full interview, as formulated at the start of the research, can be found in Appendix A.

Table 1. *Operationalization*

Main (theoretical) components	(Theoretical) concepts of importance	Example question
General- and background information	Valorisation involvement from politics, university, researchers and business	What attention do politics give to HASS valorisation?
	Comparison with STEM	Does HASS lack behind in valorisation compared to STEM?
	Barriers for valorisation	What are barriers in HASS valorisation?
Analysis of context	Organizational alignment	What is the role of universities'/disciplinary organization in HASS valorisation?
	Individual factors	How strong is the motivation for valorisation among HASS researchers?
	Disciplinary environment and norms	Which role do disciplinary norms and values play in valorisation?
	Characteristics research group	What is the role of group leaders in valorisation?
Problem identification and communication	Start problem identification	Where does the problem identification start, for which HASS knowledge is used?
	Communication channels	Are there certain communication channels or systems between users and researchers that are used?
	Previous experience	What is the effect of earlier cooperation with external partners in valorisation?
Knowledge development and selection	Compatibility	Is HASS knowledge easy to valorise?
	Knowledge characteristics	Does HASS have characteristics that are advantageous for valorisation?
Knowledge transfer activities and interventions	Distribution	How is knowledge transferred to society?
	Linkage	How is knowledge transferred to society?
Knowledge utilization	Valorisation activities	Which valorisation activities are typical for HASS?
	Type of use	Are sustaining, monitoring and impact assessment of valorisation employed in HASS?
	Impact assessment	Which types of knowledge use are present in HASS?

3.4 Sample and data collection

Semi-structured in-depth interviews are the main source of data. For the holistic case, experts on valorisation in the HASS domain were interviewed. HASS valorisation experts connected to technology transfer offices or valorisation offices at all general universities in the Netherlands were approached. Additionally, the internet was used to search for websites, organizations and individuals that concern valorisation or HASS valorisation in specific. As a result, the interview sample consists of, for example, a congress speaker, a writer of a book about the history of HASS and an employee of the Dutch Organization for Scientific Research (NWO).

For each sub-case, interviews were held with researchers in that discipline. Researchers had to be not entirely new to the field (i.e. for this study: active less than one year) to have a decent idea of the field's valorisation processes. Furthermore, researchers from different layers of hierarchy were chosen, since they might experience different effects of the organizational structure (e.g. the professor might have different connections with external parties than a PhD) and have different priorities regarding valorisation (e.g. professors might be more aware of the valorisation policy than a PhD) (Rathenau Institute, 2014). This gives the broadest view on possible mechanisms that are at play. However, during the research it became clear that more useful information was retrieved from more experienced researchers. Therefore, the majority of the interviewees are postdoctoral or higher. Researchers were partly selected based on having adjacent (valorisation like) activities and roles, like being a part-time member of an advisory commission. Other interviewees were reached through snowball sampling (Bryman, 2012). For each discipline, the three largest universities (i.e. with highest number of researchers in the particular discipline) were chosen for initial approaching of interviewees, because a larger research population increases the chance on diversity of knowledge transfer processes and therefore provide richer information. However, because snowball sampling was used, also researchers from other universities were approached.

Contact details were retrieved from the internet and interviewees were sent an initial mail with a request for an interview, and a second mail if no response came back. In total, 28 interviews were held. One interview (with interviewees 9 and 10) was exploratory and was held during the research proposal phase. Two of the interviews (with interviewees 9 and 10 and with interviewees 5 and 6) were held with an extra person attending, as they were brought along by the interviewee because of their interest in the topic. They were considered an additional source of information for the interview. Because of limited time or illness of the interviewee, two interviews (with interviewees 17 and 21) were conducted through a questionnaire that included a number of questions from the original interview. The remaining 26 interviews were conducted either face-to-face, via Skype or via telephone. All interviewees were recorded. One of the recordings failed due to technical problems, but the essential information was written down right after the interview. The recorded interviews had a duration between 30 and 85 minutes, and an average length of 49 minutes. In total, 12 interviews were conducted for the holistic case, 7 interviews for sociology and 9 interviews for philosophy. A list of interviewees is viewed in Appendix B. Since the interviews were held anonymously, interviewee details are limited to date, function and city or university.

The number of interviews was steered by the aim to reach satisfactory rather than absolute theoretical saturation (Bryman, 2012). That is, as Strauss and Corbin (1998) argue, when 'new information does not longer contribute to the overall story, model, theory or framework' (p136) that the study aims to build. During the research, the outcome of the interviews was constantly compared with the interview topics and questions, which were adjusted accordingly by including and maintaining relevant topics and discarding irrelevant ones.

Interview data was triangulated with document data, which increases the confidence of the results (Bryman, 2012). Documents were gathered that contain information about (the process of) HASS valorisation and include scientific articles, (annual) reports by advisory- and governmental organizations, brochures and information from websites. Scientific articles were obtained using Google Scholar Search Engine. Reports and other information from websites of relevant organizations were obtained using Google Search Engine. Search terms included valorisation, HASS, humanities, social sciences, arts, knowledge, valorisation, transfer, policy, university, valorisation office, academic, definition, Ministry of Economic Affairs, Ministry of Education, Culture and Science, NWO, STEM, registration, firms, or a combination of these. The internet was the most important mean to search for documents. However, documents could also come from interviewees.

3.5 Data analysis

The interviews were fully transcribed and coded. NVivo software was used for the coding process. A set of codes was developed previously to the coding process based on the operationalization that has been discussed in section 3.4. A first round of open coding was dedicated to generate many new ideas and results in a relatively high number of concepts. Any relevant text phrase (text reference) was coded with new or pre-developed codes. During this step, codes were constantly compared with their text references, and might have been changed as a result of new information or insights. Codes were either concepts or categories, the latter being more abstract and subsuming concepts (Bryman, 2012). For example, 'problem identification' may be a category that subsumes the concepts 'user problem identification' and 'communication channels'. The second round of axial coding dismissed irrelevant concepts, highlighted concepts as categories and groups concepts into categories. These two steps were not conducted once in a chronological order, but rather iteratively, moving back and forward between the two steps, constantly refining the codes. Figure 3 shows a part of the resulting set of codes as viewed by NVivo. Also, the text references that belong to the codes (in this case to the code 'culture') are shown. To give an idea about the thoroughness of the coding process, appendix C contains a summary of the number of text references and the number of different codes used for each interview transcript. For an insight in the full set of codes, transcripts or interview recordings please contact the author.

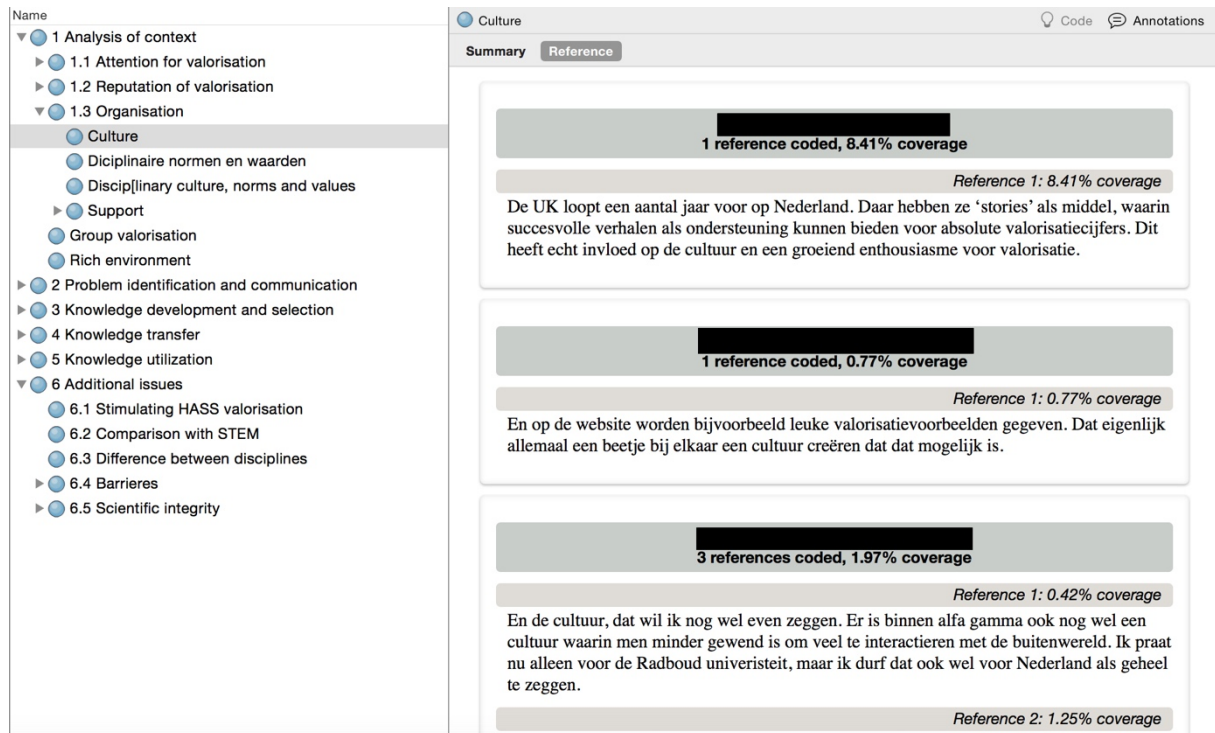


Figure 3. Example of the resulting set of codes (left) with the corresponding text phrases for that code (right). The black bars ensure the anonymity of interviewees.

Along the coding process memos were written to capture general ideas, ideas about relations between codes or further elaboration of codes. From the resulting set of categories, codes and possible relations or mechanisms, a comprehensive theoretical description and analysis is made in the result section about the main actors, paths and processes through which valorisation emerges in HASS. Later, in the conclusion, a more holistic view is given about the valorisation process in HASS, to answer the main question of this research.

3.6 Validity and reliability

Some aspects of validity and reliability are relevant for this study to discuss. First, construct validity is the extent to which the concepts that are found in the study, are congruent with reality. In this study, three measures are taken that increase the construct validity (Merriam and Tisdell, 2015). First, prior to the actual research, two exploratory interviews were conducted. This enabled an early check of the view and the assumptions of the researcher that conducted this research. Second, the interview data was triangulated with concepts from scientific articles, various reports, websites and other relevant articles. Third, a respondent validation was conducted by one interviewee, who is a valorisation expert (interviewee 10). He checked whether the result section reflected his experience, view and knowledge about the topic. He identified no missing topics in the results. However, his feedback was the basis for some minor refinements in the result section.

Triangulation of different cases and exploratory interviews increase the reliability of the study, by increasing the confidence in the consistency of the results (Merriam and Tisdell, 2015).

Finally, the external validity defines to what extent the findings can be generalized to other social settings. Since the geographical scope of this study is limited to the Netherlands, this study does not aim to generalize its findings to other countries. Nevertheless, one way to increase the generalizability of qualitative research outcomes is through a thick description of the context, that enables researchers to assess whether their situation is similar to that of the research (Merriam and Tisdell, 2015). Such a description is given in the results (see chapter 4.1). Probably more relevant for this study is whether the findings are generalizable to other universities and other researchers than those interviewed. In aiming to gain generalizability, valorisation experts from all general universities in the Netherlands have been approached. From the 9 general universities, two universities have not been reached: Erasmus University (no response on email and reminder email) and Tilburg University (no individual or body responsible for valorisation). Therefore, the situation around valorisation in these universities might differ from the results in this study. With regard to the researchers, the data revealed numerous different positions about valorisation, both negative and positive. This richness in data advocates for a broad coverage of views and opinions, and is therefore likely to cover a large part of the views and opinions of researchers that not participated in this study. Furthermore, the researcher that conducted this research was convinced that data saturation was reasonably achieved, for two reasons. First, the last five interviews did not yield any new categories, only additional information about existing categories. Second, each interviewee was asked at the end of the interview whether he or she thought there are important additional issues that have not yet been addressed in the interview. This ensured optimal depletion of potential information.

All in all, this research employs six of the eight possible strategies, suggested by Merriam and Tisdell (2015) to increase validity and reliability, as summarized in table 2. The audit trail was not applied, since it consumes very much time (Merriam and Tisdell, 2015) and peer review was not applied because of the lack of peers knowledgeable of the topic.

Table 2. *This study's employment of reliability and validity strategies that are proposed by Merriam and Tisdell (2015).*

Strategy	Employed in this study by:	Increases
Triangulation	Document research and multiple cases	Construct validity and reliability
Respondent validation	Checking results by a valorisation expert	Construct validity
Adequate engagement in data collection	Searching for saturation	Construct validity
Researcher's position or reflexivity	Exploratory interviews previous to the research	Construct validity and reliability
Peer review/examination	-	Construct validity and reliability
Audit trail	-	Reliability
Rich, thick descriptions of context	Describing the situation of valorisation in the Netherlands	External validity
Maximum sample variation	Aiming to address all relevant universities in the Netherlands	External validity

4 Results

This section will first describe the most important findings (i.e. the most important categories) that arose from the interview data. The concepts and categories that emerged from the data have been allocated to one of the components of the framework by Ward et al. (2009). For an illustration how this is done in Nvivo, see figure 3 in section 3.6. The interview data in chapter 4.1 is supported by document literature to provide a broader picture of the context. Deviant topics are mentioned in a separate chapter: 4.6. In chapter 4.7 it is discussed how to stimulate valorisation, according to the interviewees. Additionally, box 1 (page 25) and 2 (page 33) include some discipline-specific valorisation issues in respectively the disciplines philosophy and sociology.

4.1 Analysis of context

4.1.1 A brief outline of valorisation in the Netherlands

According to a report by the The Ministry of Social Affairs and Employment, the amount of higher educated workers (professional university and university) in 1996 was 18% of the total labour force in the Netherlands and will increase to 40% in 2030 (Ministry of Social Affairs and Employment, 2014). The Dutch government has expressed the desire to compete with the highest knowledge economies in the world (Ministry of Education, Culture and Science, 2014). It is, for a large part, the responsibility of universities to maintain a steady outflow of knowledge(workers) into society. In 2010, a valorisation program was launched by the Dutch Ministry of Economic Affairs and the Ministry of Education, Culture and Science (Ministry of Economic Affairs, 2015). This program aimed to bring a ‘structural strengthening and consolidation of the valorisation process in the Netherlands.’ (Ministry of Economic Affairs, 2015, p2), through a financial impulse of 63 million euros for funding of research consortia. Furthermore, valorisation has become a part of the Standard Evaluation Protocol (SEP) that is used to assess research quality at universities (interviewee 15). In consultation with the Ministries of Economic Affairs and Education, Culture and Science, science subsidy organization NWO also announced to focus more on valorisation (Ministry of Economic Affairs, 2015).

The movement to make universities gradually more independent from governmental subsidies, is driven by the neo liberal idea (interviewee 13), in which free market is essential. Thus, universities need to make their own money, and interact with business, while the amount of governmental funding is decreased in the last 15 years (interviewees 2, 12, 13, 15 and 16; VSNU, 2016c). The neo-liberal idea is not new, nor is the activity of making value from knowledge in Dutch universities. The term ‘entrepreneurial university’ was already introduced in 1979 by David Birch and has since then influenced universities to become more business-oriented and create a new form of revenue by commercializing knowledge (Van der Zande, 2012). The VSNU reports on their website that the interest of entrepreneurial education among students has increased from 20% in 2007 to 52% in 2010. Furthermore, the VSNU refers to a 2009 research commissioned by the Ministry of Economic Affairs showed that there were 24 ‘science parks’ in the Netherlands, of which 6 are of national interest. Finally, six Centres of Entrepreneurship have been established, all related to the universities or graduate schools in their city (VSNU, 2016a). Although this

entrepreneurial development has a highly beneficial effect on the valorisation of academic knowledge, it seems not to serve HASS disciplines as well as it serves STEM disciplines. Since knowledge and inventions in STEM disciplines are more susceptible to be converted into commercial products or processes, the valorisation of HASS knowledge has been reported to remain undervalued in the Netherlands (Benneworth & Jongbloed, 2009). The Dutch science and technology advisory organization Rathenau Institute states the following about valorisation in the humanities and social sciences:

“We expect the topic (valorisation) to be prominent on various policy agenda’s the coming years. On the agendas of the Dutch ministries of OCW (performance agreements) and EZ (topsectors), the science funder NWO (knowledge utilization) and the European Union (Horizon 2020, societal challenges). Therefore, it will be necessary for researchers and researcher organizations to keep giving substance to the term valorisation.” (Rathenau institute, 2016c, § 1).

4.1.2 Increasing attention for valorisation

Several interviewees mention that valorisation has been of increasing importance in the last five to ten years (interviewees 1, 5, 7, 15, 20, 22, 25 and 29). Whether or not as a result of this policy, the general trend is that the idea of the ‘ivory tower’ is not as sacred as it used to be and researchers start to see more value in translating their research to societal issues and contexts (interviewee 2, 8 and 25). This is especially the case among younger generations of researchers (interviewees 2 and 8). Interviewee 5 puts it like this:

“As I see it, we are at the beginning of a development in which valorisation gets an organic place in the science system.”

The valorisation policy has resulted in the fact that also university boards focus more on valorisation (Ministry of Economic Affairs, 2015). This notion is confirmed by interviewees at Utrecht University, University of Amsterdam, VU University, Leiden University, TU Eindhoven and Radboud University (interviewees 2, 5, 8, 12, 16, 22, 23 and 28). Especially the technical universities seem to be successful in valorisation, since the knowledge they produce is already closer to the industry (interviewee 2). However, researchers are not always satisfied with the way in which the university boards treat valorisation. Interviewees argue that the attention for valorisation is mainly rhetorical (interviewees 7, 18, 26 and 27), the form of implementation is not considered thoroughly (interviewee 30) and practical support (interviewee 7) or a reward system (interviewee 18) for valorising researchers is missing. The following fragment from the interview with interviewee 7 illustrates the situation:

Interviewee 7: “Actually, they say, so much is happening already, we only have to make that visible. So they see it quite administrative. And then I think, yes, but what if I am a young researcher who has to write a Veni? Than those examples of professors who did something (valorisation activity) are useless to me. Then I want to learn how to do that! For that, I think, there is limited attention from the university board. For stimulation, awareness, training capabilities, support. On a lot of aspects, when we talk about non-economic valorisation, there is room for improvement.”

Interviewer: “So, what is the goal of the university board?”

Interviewee 7: “Justification towards the Ministry. Because of performance agreements in which they say ‘we are going to stimulate valorisation as well’. It is really directed towards the outside world.”

Furthermore, university boards are suggested to have a preference for economic valorisation (interviewee 12). This could be detrimental for HASS valorisation, argued by interviewee 23:

“Well, you see, valorisation is seen as one of the most important revenue streams of the university. But there is simultaneously a risk” ... “It would be unfortunate when valorisation only means: bringing in money. While value creation is a lot broader than bringing in money for the university.”

The preference for economic valorisation reflects the situation in politics. Several interviewees stress that the valorisation is understood in a narrow sense by politicians, lacking attention and funding for HASS valorisation, both on a national- and a European level (interviewees 2, 11, 14, 15, 17, 18 and 24). Part of the problem on national level is that the valorisation program is financed by the Ministry of Economic Affairs (interviewee 8), and thus automatically have a more economic understanding of valorisation (interviewee 24). For example, in 2012 the Ministry of Economic Affairs linked the science policy to the innovation policy by introducing nine top sectors that are funded by the government and are aimed to stimulate predominantly economic valorisation (interviewees 14 and 24). Furthermore, STEM valorisation is more concrete and tangible (interviewee 15). Interviewee 15 explains:

“Things like licences and patents and all those kind of inventions, spin-offs.. are much more concrete and tangible in comparison to the social sciences. So therefore it is much more present and alive in the minds of the politicians.”

Nevertheless, interviewees 7 and 8 state that recently, in 2014, the Ministry of Economic Affairs pronounced the aim to involve HASS more in the valorisation program.

4.1.3 Reward systems for valorisation

There is no obvious reward system for both valorising STEM and HASS researchers in universities (interviewees 2, and 15). A reward for valorisation is mainly received in the form of reckoning by colleagues (interviewees 11 and 27). However, some interviewees note that recently valorisation has become a part of performance reviews and job interviews (interviewees 7, 8, 13, 16, 22, 23, 25 and 29). Also, some interviewees argue that universities or faculties have introduced awards to stimulate valorisation (interviewees 8 and 29). Nevertheless, without exception, all interviewees agreed that scientific publications are the most important assessment criterion.

The reward for valorisation in subsidies is, in contrast, widely present. Both in national and in some European subsidy requests, it is necessary to prove that the research is also relevant to society to be eligible for a subsidy (interviewees 2, 7, 13, 25 and 27).

4.1.4 Confusion about the definition of valorisation

The ministry of Education, Culture and Science, and NWO hold a broad definition of valorisation, including social value creation (Rathenau, 2016b). Nevertheless, there is a lot of confusion among researchers about what valorisation is or should be, and what is expected from them (interviewees 7, 20 22, 24, 25 and 29). Whether researchers have a broad or narrow definition of valorisation varies. Possibly as a result of this confusion, there exists an unjustified sense among HASS researchers of being subordinate to STEM research regarding valorisation (interviewees 2 and 10). Namely, when a broad definition is held, valorisation possibilities are often abundant in HASS (interviewee 14). Interviewee 22 stated that his department realized their valorisation activities only after using a broad definition of valorisation. This effect is confirmed by interviewee 7 for HASS in general:

“When you let go of the current perception of valorisation and start to look again what kind of relations HASS researcher have, how much contribution that produces. Then you find just as rich a picture.” (as in the STEM sciences).

Since politics have not been clear about their definition of valorisation, interviewees argue that in the next few years, universities and research institutes have to elucidate, on a national level, the definition of valorisation (interviewees 22 and 23).

Thus, there is a lack of awareness of the broad definition of valorisation that is held by the ministry of Education, Culture and Science. However, some interviewees argue that, although the ministry claims to appreciate non-economic valorisation as well, in reality economic valorisation is generally valued higher than non-economic valorisation (interviewees 18 and 24) and politicians misuse the term valorisation to their own benefit:

“It is like, the term that (Roland) Barthes somewhere calls mythology. A mythology, he says, is reframing your message in such a way that you can always deny the message you deliver. So, in this case you say ‘valorisation’, but your mean economic benefit! But when someone criticizes you, your say ‘ooh no, I don’t mean economic benefit, valorisation is all those things you also find important!’” (interviewee 24)

This, by researchers perceived, tendency of politics to have a preference for economic valorisation (see chapter 4.3.1) causes a lot of resistance and makes the reputation for valorisation among researchers not so good (interviewees 1, 5, 7, 8, 22, 24, 26, 28 and 29). HASS researchers feel that it is an externally imposed, time and energy consuming task (interviewees 1 and 22), they may feel that valorisation is not possible in their own line of research (interviewee 24), or they are afraid that it might affect the nature of their research too much (interviewee 19). On the other hand, researchers do appreciate colleagues that are involved in valorisation activities (interviewees 7, 11 and 27). Thus, the negative association is for a large part due to the economic aura that the term ‘valorisation’ carries. Interviewee 26 explains:

“It is a very economical term. It has been used in Marxism, but also later in English language it is used as the economical process of adding value to a product, by any action. And that, of course, creates distrust. You get the feeling that people think that the one that invented that word and all the big words that are thrown around it, that it is all hot air. Yes, I get that.”

4.1.5 Valorisation culture and organizational factors

The university's organization plays an important role in valorisation (interviewees 2 and 5). Although a lot of researchers learn how to valorise by their selves, interviewee 7 argues that:

"People are looking for a little support" ... "And when you help them on their way, they go a long way themselves."

Moreover, a lack of organizational support can impede a valorisation process:

"He tried to arrange something within the faculty to do those projects. Well, no one understood what he was doing, no one could support him administratively." ... "He concluded: I only walk into walls when I want to valorise, there is no support, no understanding, no administration." (interviewee 5)

Several interviewees argue that there is not much of a valorisation culture among HASS researchers and in HASS disciplines or universities (interviewees 2, 5, 6, 7, 12, 13 and 25). HASS researchers are suggested to be less used to having contact with external parties (interviewee 2), there is no tradition of valorisation (interviewee 25) and there is not much organizational support and little capacity by valorisation offices to support HASS researchers in valorisation activities (interviewees 1, 3, 4, 5, 7, 12, 18, 20, 22, 23, 25, 27). Although there are some organizational measures arranged to stimulate and ease valorisation, like knowledge rights arrangements, a research support office and valorisation contact persons in technology transfer offices, these measures are generally not aimed for HASS specifically. As a result, researchers and research departments are still in the process of seeking how to fulfil their valorisation task (interviewee 30).

Nevertheless, a valorisation culture is not necessarily absent everywhere in HASS. Traditional disciplinary norms (e.g. participation in public debates) (interviewees 22 and 24), or a university's historical tradition (interviewee 19) can create a culture of valorisation. Also, one interviewee argued that both the university and NWO have financial means available for researchers that actively seek for assistance in valorisation activities (interviewees 29 and 30).

Recently, some universities have initiated organizational initiatives to enhance the awareness that valorisation is a possibility for HASS researchers. Initiatives include a Humanities venture lab (interviewee 8), workshops (interviewees 1, 2, 3, 7, 8 and 19), consultation between valorisation offices and university board members or researchers (interviewees 3 and 8), and a daily or weekly newsletter with valorisation examples (interviewees 12 and 26). Also, there are several initiatives by researchers themselves to conduct small valorisation projects (interviewee 22).

Another organizational issue that seems to have impact is the question whether valorisation is done individually or in groups. Some interviewees argue that valorisation should not be at the shoulders of individual researchers, since not every researcher has the capabilities or the motivation to pursue valorisation (interviewee 30). A large part of the interviewees argued that valorisation benefits from being pursued by groups rather than individuals, since groups have the ability to distribute tasks to people that are enthusiastic for valorisation

(interviewees 1, 4, 7, 11, 15, 16, 21, 25, 27 and 29). Furthermore, groups have more financial means and the personal network of all group members can be used (interviewees 4 and 7). Since HASS groups are often small, this could have a negative effect on valorisation (interviewee 1).

Finally, interviewee 2 argues that a lot of interaction with external parties may stimulate valorisation in general. However, for HASS, a higher frequency of interaction with external parties is better achieved through a digital meeting space, like a website where consortium research is promoted (interviewee 2), than in the form of a science park. This is because, in general, the parties that are interested in HASS knowledge are not likely to be found-, or suitable to reside in such a science park (interviewee 4). Geographical proximity of different disciplines, on the other hand, is useful for research and indirectly for valorisation by creating new ideas and opportunities (interviewees 13, 14 and 24).

4.1.6 To sum up

Valorisation is a policy issue on national and European research agenda's and is stimulated through financial impulses and structural changes in the scientific funding system. However, valorisation policy by universities is carried out mainly in a rhetoric sense, rather than in a practical sense. In line with this rhetoric, they mainly promote valorisation through simple and compelling valorisation examples with a business model, which often come from STEM disciplines. Valorisation is often narrowly understood in an economic sense, both by policy makers and researcher. As a result, there is confusion about the definition of valorisation among HASS researchers, and aversion because they feel their valorisation activities are not valued as much by the university and by politics.

Box 1: Valorisation in philosophy

Valorisation has traditionally been a part of philosophy, although it was never called valorisation.

“It is part of the moral. You are asked for something (lecture, etc.), you don’t always say yes, but sometimes you say yes, and that is very normal and conventional.”
(interviewee 24)

Philosophy treats topics that are about life and humanity itself and therefore receive wide interest among the general public (interviewees 26 and 30). Philosophy is eminently suitable to deal with questions about understanding life and giving meaning to it or not (interviewee 27). As a result, valorisation in philosophy typically includes media performances, public lectures and discussion sessions. Interviewees 23 and 26 argue that philosophy contributes to a better society by valorising its knowledge.

Furthermore, philosophy is the most holistic discipline in science. As soon as scientists start to ask meta-questions, they become philosophical questions.

“Historically, every discipline was called philosophy. So, physics was called natural philosophy. And every discipline is still occupied with a philosophical task.”
(interviewee 23)

As a result, philosophy can valorise their knowledge in helping other disciplines with their philosophical questions. In that case, other disciplines take on the role of the societal party.

There is one issue that makes valorisation in philosophy very topical. Interviewee 25 argues that philosophy is going to play a very important role in the next decennia, because of ever increasing technological developments:

“Surprisingly, the rise of technology continuously raises questions about who we are. That is very odd, isn’t it? Because we are increasingly interacting through technical devices, we seem to lose ourselves sometimes. And the question about what we are in relation to all these technical artefacts becomes increasingly important. I’m sure of that. In 50 years, philosophy is way more important. That is what I think.” (interviewee 25)

4.2 Problem identification and communication

4.2.1 Importance of HASS valorisation

The importance of using HASS knowledge in society is stressed by several interviewees. They argue that HASS has the knowledge and responsibility to stimulate a healthy (i.e. with sound argumentation) and ongoing debate in society (interviewees 11, 19, 21 and 26) about topics like “inequality, ethnicity, gender and social class” (interviewee 19). Interviewee 11 argues that *“there is an enormous need for a sharp and better discussion about difference between groups of people”*. Interviewee 23 argues that a healthy debate stimulates a healthy society, and interviewee 26 even argues that philosophy *“makes people, in various different ways, better people”*.

On a more practical level, five ways in which the identification of a societal problem emerges were identified from the interview data: initiated by the researcher, by the user, through discussion and interaction between researcher and user, by research programming of intermediate organisations and finally through pressing societal issues. All five are discussed below.

4.2.2 Problem identification by the researcher

The idea that giving something back to society is important is widely accepted (interviewees 3, 12 and 21), especially in younger generation of researchers (interviewees 8 and 25). Nevertheless, researchers are mainly focused on their research and not so much on valorisation. This has different reasons. Interviewees 2, 24 and 27 argue that because of the way in which the scientific system works, with high competition, researchers are ignorant for the broader perspective their research takes place in:

“It is typically the time when scientists are highly competitive, everything goes quick, quick, quick. Therefore, valuable issues like thinking about the broader perspective in which your research takes place and where it stands now, disappear.” (interviewee 27)

“The easiest way to publish an article is to focus on a small subject and introduce a variant, or a new argument.” (interviewee 24)

Moreover, assessment criteria are mainly based on scientific publications. Although the assessment on valorisation within universities, as an additional factor is upcoming, for example in performance reviews and job applications, it is of no prevailing consideration. Moreover, apart from the lack in tangible rewards that researchers get from valorisation, there is a perception among researchers that they are the least appreciated for valorisation. This perception creates an aversion for researchers to spend time on valorisation (interviewee 7). Only for (associate) professorship, valorisation where funding is obtained may play an important role, since professors are responsible for the funding of their research (interviewee 2). Also, funding allows researchers to hire employees that take over their educational obligations (interviewee 14), which leaves more time for research. Thus, valorisation is mainly interesting for a researchers’ career if it helps in obtaining funding.

On the other hand, valorising activities can create opportunities for academic careers by providing exclusive access to data or research objects (interviewees 7 and 8). To illustrate this, interviewee 7 quoted a researcher that told him:

“Because I have such a great relation with prisons, I am allowed to do all kinds of interviews in those detentions.”

Interviewee 23 argues that a researcher is welcome in any university when he or she can show that he or she is successful in bringing in money. Furthermore, valorisation may increase a researcher’s network and opens doors for other career options outside academia (interviewee 14). Researchers that focus heavily on valorisation can make a career as intermediate between science and society (interviewee 25). However, they generally publish less scientific work (interviewee 21) which is in addition often frowned upon by peer researchers, as they are not considered true researchers. Although this attitude might be partially a prejudice, it also underpins the reality that valorisation activities can be very time consuming and may conflict with research quality (interviewee 25).

Apart from career perspectives, researchers have other motives for valorisation. First, since research is largely funded by governmental subsidies, researchers feel the responsibility to return their knowledge to society (interviewees 2, 12, 15, 16, 18, 23, 25, 26, 27). By doing so, HASS also increases its legitimacy (interviewee 18). Second, intrinsic motivation is an important reason for researchers to pursue valorisation. Often, researchers are passionate and convinced about their research and therefore eager to share their knowledge with others (interviewees 7, 11, 14, 19, 27 and 29). Third, social engagement is for some researchers a reason to valorise (interviewees 16 and 28). Notwithstanding the various motives, the most important factor that drives researchers remains curiosity, which makes that considerations about valorisation opportunities mostly come after the research has been conducted (interviewees 1, 2 and 5).

Two barriers for HASS valorisation concerning the motivation of researchers are a researcher’s personality (i.e. not every researcher feels comfortable to talk with media or external parties (interviewees 8 and 27)) and the fact that a lot of older researchers have a traditional vision about what science should be and are resistant in changing this vision (interviewee 25).

4.2.3 Problem identification by the user

The nature of HASS knowledge makes it more suitable for social organizations than for businesses. As a result, social and governmental organizations seem to be more interested in HASS knowledge than businesses. Additionally, firms do not realize the potential value of HASS knowledge. Interviewee 18 explains:

“I have tried in numerous ways to get in contact with business, because I think the knowledge that we produce is also interesting for business” ... “They are only interested when it is directly convertible to a project in which they can make money” ... “I find that very disappointing, and also, it says something about business”.

Nevertheless, other interviewees stress that there are also numerous examples of collaborations with business (interviewees 1 and 10). It depends highly on the discipline, and even the sub-discipline, whether business is interested. For example, philosophy in general receives very little attention from businesses, whereas the sub-discipline ethics receives more attention, since businesses often need an ethical assessment of a new technology or product. Also, in for example psychology, there is considerable interest from companies, because businesses are interested in consumer behaviour.

However, in general HASS knowledge tends to be more suitable for social and governmental organizations (interviewees 15 and 20) and the general public, because HASS knowledge fits their social character better. Organizations include schools, student associations, sport associations, culture associations, museums, advisory organizations, non-profits, NGO's, municipalities, ministries and all forms of media (interviewees 2, 8, 15, 18, 19, 21 and 29). Such organizations might invite an individual researcher to give a public lecture or approach a research group with a specific problem. One characteristic of these users, is that they do not have large financial means (interviewees 5 and 29). Therefore, a major consequence for HASS valorisation is that there is little money available in valorisation projects.

4.2.4 Problem identification through (earlier) collaboration between researchers and user

Often there is already a relation between the HASS researcher and the knowledge user, either because of personal networks or previous research in consortia. Also, often relationships are ongoing and new data and research opportunities emerge from a dialogue between the researcher and the user (interviewee 15). A dialogue goes back and forth between the two, in which the researcher has a theoretical approach to a problem or theme and the user a more practical approach. Therefore, such collaborations are often a *"constructive conflict"* (interviewee 11) between the researcher and the user and come with different snags. First, science has different time paths than societal users. Governing bodies often want to solve current problems, like housing shortages. They want to see their problems go in a foreseeable period of time. In contrast, scientists are used to conduct thorough research that takes months or even years. Moreover, even the simple fact that certain projects, deadlines and starting dates between the two parties differ, is reason for a less smooth collaboration (interviewees 14, 18, and 19). Second, science has different goals than societal users. The nature of science, and in particular the nature of HASS, is to be critical, while governing bodies have a practical approach and do not want to be criticized. This divergence in goals is also reflected in the interaction with media. Media often want to tell a compelling story, while researchers want to be nuanced and without definitive conclusions (interviewees 12, 18, 19, 24 and 28). Third, there often exists a certain cognitive distance between academics and users. Collaboration with external parties and people that are not familiar with a research topic, or do not speak a particular jargon, can be a barrier (interviewees 9, 11, 14, 18, 19, 20, 23, 26, 27, 28). Fourth, interviewee 21 argues that firms, organizations and media are not always aware of the knowledge that is available. This problem can be tackled, for example, by adapting the research group's website (interviewee 21). Finally, the collaboration with firms also has the ability to cause friction. Firms need to make profit, and are very dependent on their position in the market. This means, for example, that they are eager to keep knowledge that they develop, to themselves, since it gives them a competitive advantage. This may lead to conflict with science, in which sharing of knowledge to be open for peers and for critique is an important value (interviewee 19).

Also, reputation is highly important for firms to keep a competitive position. Therefore, they have major interest in the outcome of the research and tend to affect the independence of the research (interviewees 12, 13, 19, 25 and 29). Given the next quote, this can go quite far:

“You get a cheque, but also a few pages with the conclusions. Good luck with your independent research, but these are the conclusions.” (interviewee 19)

Nevertheless, such a situation is quite exceptional, and a lot of these problems can be prevented with contractual arrangements. If contract agreements are made in advance, most collaborations with business are without such problems (interviewee 10).

Because of the potential problematic interaction with firms, and the oversimplifying of research results in the media, some HASS researchers report to be reluctant to collaborate with external partners (interviewees 12 and 19). Therefore, they argue, successful valorisation is a responsibility from both the HASS researcher and the knowledge user.

4.2.5 Problem identification by intermediary subsidiary organizations

One of the most important ways in which research is steered towards societal problems, is through national or European subsidiary organizations, which fund quite a large part of research in the Netherlands (interviewees 11 and 15). Such organizations have certain thematic programs, inspired by societal issues. They publish calls (i.e. funding opportunities in a certain research theme or topic) that are available for granting research funding (NWO, 2016). Apart from steering research in societally relevant themes, these organizations are focusing recently more and more on actual valorisation practices. The most important Dutch subsidiary organisation, NWO, has made a distinct valorisation paragraph mandatory for each subsidy request since 2012 (interviewee 14). Currently, 20% of the assessment for research proposals is based on relevance for society and in consortium research this is even 50% (interviewee 14).

4.2.6 Problem identification by pressing societal issues

One last way in which the use of academic knowledge is initiated is because of pressing societal issues. Interviewee 2 explains:

“Of course there are the things that hit us quite easily, not only in Nijmegen or the Netherlands.” ... “These days, with cyber security, we have someone that is focusing on cyber security, the money is pouring in.”

Thus, the pressing issue of cyber security initiates the use of scientific knowledge. This way of problem identification also occurs in HASS related topics. Think for example about research on the emergence and spread of terroristic ideas and action (interviewee 19).

4.2.7 To sum up

The data revealed five different ways in which problem identification can emerge in HASS:

- initiated by the researcher
- by the user

- through collaboration between researcher and user
- through intermediary organizations
- through pressing societal issues

The most common ones seem to be through a dialogue between researchers and societal partners, and through intermediate organizations. Individual researchers do not actively pursue valorisation opportunities, because of a lack of direct relevance to their career. Occasionally, very specific areas of research can benefit from pressing societal problems. In addition, the importance of HASS' contribution to societal debates is stressed by several interviewees.

4.3 Knowledge development and selection

4.3.1 Knowledge selection in Dutch universities

Websites of all Dutch universities state that, to a greater or lesser extent, their research is inspired and driven by societal themes. However, whether the knowledge that is created is more suitable for societal problems, is questionable. Interviewee 20 argues:

“I think those themes are mostly window dressing. Because they are so broad, anything fits within them.”

Academic knowledge is generally very fundamental, which makes it hard to find a connection with society (interviewee 2). This is especially the case for general universities, in which HASS disciplines mostly reside. Of course, depending on the discipline, this statement may hold or not. For example, sociology produces knowledge about society. Although this knowledge might be very fundamental, it is likely that it is useful to society nonetheless. Technical universities are suggested to think more in terms of concrete problems (interviewees 11 and 29), and therefore make the connection with the industry easier (interviewees 2 and 29). Therefore, the few HASS disciplines (e.g. Psychology, Health and Technology, TU Twente), that are sometimes part of technical universities are more designed towards application and are more susceptible for- (interviewee 11) and more successful in valorisation (interviewee 29).

4.3.2 Valorisation potential of HASS knowledge

HASS knowledge is typified by several interviewees as having a critical and reflective nature and being able to open thinking in a broader perspective on societal issues (interviewees 2, 7, 19, 21 and 24). An important part of the valorisation potential of HASS knowledge lies therefore in stimulating societal debates and enhancing their quality. Several interviewees stress that there is definitely a demand from society for HASS knowledge in these debates (interviewees 2, 11 and 23). Second, HASS has the ability to contribute to the social aspects of the grand societal challenges (interviewee 2). To illustrate this, interviewee 11 argues:

“We participate in the energy transition, from the idea that the transition to non-fossil fuels is for a large part a social issue. More or less half of it. The technology is pretty much available. The infrastructure has to be built, but is not absolutely absent. But what lacks, is a

desire from people, a feeling of need.” ... “That can be seen as a sociological question. That aspect receives very little money and very little interest.”

As that last sentence of the quote reveals, there seems to be a tendency among policymakers and business to revile the value of HASS knowledge (interviewee 19). This is also the case at European level (interviewee 22). For example, interviewee 2 argues that the social aspects are undervalued in the grand challenges, as formulated by European subsidiary program Horizon 2020. However, interviewee 14 argues that currently there is a shift of attention towards the use of HASS knowledge in NWO consortia. The main valorisation potential, however, seems to lie in the non-economic domain, with societal parties, like schools, culture associations and governmental institutions. This domain also offers a lot of valorisation potential. Interviewee 7 argued that he could always think of a valorisation opportunity, besides giving a public lecture, with the researchers he accompanied in their funding request at NWO.

4.3.3 Multidisciplinarity

Interviewee 21 argues that there is an ongoing trend of working more and more multidisciplinary. A lot of societal issues demand a multidisciplinary approach (interviewees 4 and 15). For example, refugee issues ask for insights from *“politicology, administration, social sciences, sociology, antropology and communication”* (interviewee 15). HASS knowledge can also be used in combination with STEM knowledge. For example, in developing speech technology software, both computer scientists and linguists are needed (interviewee 2). Multidisciplinary research is suggested to provide a more thorough approach to societal problems (interviewee 15) and new valorisation opportunities emerge from collaboration between different disciplines (interviewees 2, 8 and 12), because it forces researchers to diverge from their common way of thinking (interviewees 3 and 19).

Interviewees 2, 5, 7, 13, 14 and 29 argue that there is a lot of opportunity for valorisation in HASS, when it is combined with other disciplines, and in particular with STEM disciplines. However, the interviewees also agree that HASS disciplines have trouble to make the connection with STEM disciplines. This may partly be explained by the notion that HASS researchers do not want to be ‘used’ in valorisation projects, where the focus is on technology and HASS is treated as a side issue (interviewees 7 and 24). Interviewee 2 puts it quite definitive:

“When working multidisciplinary, HASS is never in the centre of attention.”

Although examples can be mentioned to refute this statement, it shows the general trend for HASS-STEM collaboration. An additional issue in collaboration between HASS and STEM disciplines is that they have a cognitive distance, which poses problems for creativity (interviewees 11, 16, 29 and 30).

4.3.4 Competing on valorisation

As mentioned earlier, valorisation plays a substantial role in research funding in NWO (interviewees 14, 21). It is the policy of NWO to stimulate all researchers to think about valorisation and writing a valorisation paragraph is an obligatory part of each funding request (interviewee 14). NWO keeps a discipline’s valorisation possibilities in mind during

the research proposal assessment and the definition of valorisation is broad (e.g. contribution to another academic discipline is also seen as valorisation). Nevertheless, disciplines that have difficulties to find valorisation opportunities are disadvantaged in obtaining funding (interviewees 12, 13, 14, 24 and 29). On top of that, since HASS valorisation is mostly non-economic and often fails to yield funding from business (interviewees 13 and 18), HASS is more dependent on subsidies from organizations like NWO. On the other hand, interviewee 12 argues that, because of the low research costs, less funding is needed to do research in HASS.

Competition on valorisation seems to be slightly detrimental for HASS in general. However, it is rather the applicability of a discipline's knowledge that is decisive in whether competition on valorisation causes a problem or an opportunity.

4.3.5 Role group leader

Finally, the role of the research group leader seems to be of substantial importance for valorisation. He or she can stimulate researchers within the group by encouraging them to pursue valorisation activities, by setting a good example and by allowing them to spend time on doing valorisation activities (interviewees 4, 7, 15, 16, 22 and 25). Furthermore, a group leader is responsible for the type of research that is conducted, consequently enhancing or decreasing opportunities for valorisation, depending on its societal relevance.

4.3.6 Difference in valorisation potential between disciplines

One of the issues that arose during the interviews was that there is a major difference in valorisation potential between separate disciplines and sub-disciplines as a result of the type of knowledge that is produced (interviewees 2, 4, 22 and 30). Some disciplines are almost designed to serve society, like applied philosophy. Others are inherently very hard to valorise, like theoretical philosophy. This applies not only to HASS disciplines, but also to STEM disciplines (interviewees 7, 11, 14, 24 and 30).

4.3.7 To sum up

Although universities try to fulfil their societal role by pronouncing their societal engagement, the HASS knowledge that is produced is, except for some specific disciplines, very basic and non-commercial, which makes it more difficult to get funding and to valorise. Multidisciplinary research could create more valorisation potential. Also, the group leader could have a stimulating role in valorisation. Given the critical nature of HASS knowledge, the valorisation potential for HASS lies mainly in stimulating societal (policy) debates.

Box 2: Valorisation in sociology

Sociological research is about society and all its facets. Therefore, the nature of sociological knowledge is very suitable for application in society. This is reflected by the fact that a lot of societal parties are very interested in sociological knowledge. In particular, sociology seems to have impact on policy and policy discussions in society. Sociology is able to provide the theoretical mechanisms to shape the assumptions that policy is based on (interviewee 21). However, it seems that the connection with business is hard to make:

“..technical firms and engineering firms have a very hard time in seeing the value of social scientific research. At least, they show a certain amount of tacit support, so they get that it is important. But they see it as important for politics and society, not as useful for implementing new gene technology in the Netherlands.”

A factor that might be at the root of this disinterest, is sociology's congruence with societal themes. Namely, the contribution of sociology is sometimes reviled, since society is already familiar with their concepts:

“Think about concepts like inequality, ethnicity, gender, social class. All classical sociological concepts that are used by everyone. So, when you regard that as valorisation.. I think massive impact. But not everyone sees it like that. Even worse, people say: ‘sociology, what good is it for? It is common sense, we already know what social class is.’ So disciplines like sociology are the victim of their own success. That’s what sociologists say of course.” (interviewee 19)

With the rise of big data and computer technology, valorisation opportunities for sociology can also be found in combination with computer sciences. Sociology is able to provide the sociological understanding and the meaning behind algorithms that are developed by computer sciences:

“We work at the side of conceptual thinking and qualitative research” ... “But what they are interested in, is the backside. Can we develop an algorithm to find and program patterns? And can we prevent the influence of radicalization?” (interviewee 19)

4.4 Knowledge transfer activities and interventions

4.4.1 Lack of valorisation skills

Some interviewees argue that HASS researchers are not necessarily aware of how they should bring about valorisation (interviewees 28 and 29) or write a valorisation paragraph (interviewee 9). Interviewee 2 argues that HASS researchers are not successful in framing their research in an interesting way for external parties and general public. This lack of skills can be attributed to the fact that researchers are not educated to conduct valorisation (interviewees 7, 13, 20 and 29). Interviewee 7 explains the problem:

“..there is no training, so they lack the skills. You learn how to get in a good journal in your discipline, but how to get questions from societal partners, or how to think about who else would be interested in my knowledge, besides the general public. There is no education to do anything with that question.”

4.4.2 Knowledge transfer channels

Knowledge can be transferred in many ways. It happens both through distribution and linkage between researchers and external parties (see theory section for elaboration on distribution and linkage). Both are discussed below.

The internet and all sorts of (often online) media are major channels for distribution of knowledge. Research groups use their website to promote themselves and the knowledge they have (interviewees 4, 12 and 27). Furthermore, HASS researchers use numerous platforms, mainly on the internet, to send out knowledge. This is often done in a popularised form through, for example, (online) television, YouTube, (online) magazines, blog websites, Twitter, newspapers and alumni newsletters (interviewees 11, 15, 16, 21, 23, 26, 28 and 29). Interviewee 23 stresses the use of the internet in particular:

“There are a lot of philosophical blogs, there are a lot of philosophical podcasts made by amateurs and professionals. An incredible amount is put on YouTube. Old interviews with old philosophers, lectures about philosophers, even in the Kahn academy, all sorts of introducing lectures are given about this or that philosophical subject. Thus, the internet is incredible. A major source for philosophical debate and philosophical knowledge. Also for accessible philosophical knowledge.”

Most of these transfer activities are not strictly push-driven distribution, as defined by Ward et al. (2009), since they are not meant to convince a user to buy or use the knowledge. Rather, they have a more passive character and aim to show which knowledge is available and let the user free in how to interpret or react to the knowledge:

“We are going to rebuild the website of sociology, so that when someone wants to find us, and wants our knowledge, they will find what they need.” (interviewee 12).

Strictly push-driven marketing-like strategies are less common (interviewee 7). This may also have to do with the fact that HASS does not create concrete products (interviewees 13 and 22).

Knowledge dissemination by interaction and dialogue between researcher and knowledge user (linkage) is also widely present in HASS. New valorisation ideas, projects and opportunities emerge from informal communication (interviewees 8, 11, 16, 18, 20, 22, 27 and 29) or formal communication channels. There is an interplay between the two; Informal communication leads to the initiation of formal communication activities, like expert meetings, which in their turn increase personal networks and informal communication. Formal communication channels are various. Several interviewees stated that a lot of researchers (in particular senior researchers) have ancillary positions in organizations (mainly advisory bodies) outside the university (interviewees 1, 2, 3, 7, 13, 18, 20 and 29). However, Interviewee 2 argues that most ancillary positions are in the scientific domain, while there are little ancillary positions in the societal domain, such as a position in an advisory commission for government policy. Other formal ways to increase interaction and dialogue between researchers and knowledge users are expert meetings, online platforms, congresses, workshops and symposia (interviewees 2, 4, 8, 11, 15, 16, 20, 21, 27 and 28).

Valorisation offices, technology transfer offices and knowledge brokers play an important role in knowledge dissemination by finding matches between researchers and knowledge users and improving the networks between both parties (interviewees 7 and 8). They may organize formal activities or actively search for potential stakeholders:

“I move outside, to the ministries, to municipalities. I have been to refugee work to ask ‘what are your knowledge needs?’ And ‘look, these are the researchers and subjects we have, are there matches?’” (interviewee 7).

4.4.3 To sum up

Knowledge transfer happens both through passive distribution and formal or informal dialogue between HASS researchers and external parties. Media and the internet are major channels to disseminate HASS knowledge into society. Knowledge transfer is complicated by the lack of valorisation skills among researchers.

4.5 Knowledge utilization

4.5.1 Typical HASS valorisation activities

Table 3 shows all the valorisation activities that were mentioned by the interviewees as typical for HASS, as well as the type of use. See paragraph 4.5.2 for further explanation on the type of knowledge.

Table 3. *Typical HASS valorisation activities and products.*

Activity	Mentioned by interviewee(s)	Type of use
Public lectures	2, 4, 7, 15, 16, 19, 21, 22, 23, 24, 25, 26 and 27	Conceptual use
Advisory/consultancy work	1, 2, 4, 7, 8, 16 and 17	Political use
Organizing trainings, workshops and master classes	1, 18, 19, 22, 25 and 26	Political use
Writing popular articles or books	22, 24, 26, 27, 28 and 29	Conceptual use
Media appearances (tv, radio)	4, 16, 21, 22, 27 and 29	Conceptual use
Writing newspaper articles	7, 20, 25, 26, 27 and 29	Conceptual use
Participating in public debates	4, 7, 8, 23 and 30	Conceptual use
Contributing to exhibitions	2, 8, 13, 16 and 29	Conceptual use
Writing blogs	13, 16, 26, 27 and 30	Conceptual use
Collaboration with high schools (education packages/projects)	7, 20, 22, 26 and 30	Instrumental use
Participating in advisory boards/committees	2, 23 and 29	Political use
Editor of popular scientific magazine or series	16, 26 and 29	Conceptual use
Organizing discussion groups or debates	7, 15 and 23	Conceptual use
Participating in symposia and conventions	18, 20 and 23	Conceptual use
Ethical annotations on website	27, 29 and 30	Conceptual use
Writing research reports for (consortium) partners	16, 20 and 27	Political use
Interactive website	7 and 16	Instrumental use
Share data bases	4 and 16	Instrumental use
Writing educational books and folders	28 and 29	Conceptual use
Software products	17	Instrumental use
Participating in a jury	23	Political use
Participating in board of societal organization	28	Political use
Collaboration projects with newspapers	21	Conceptual use
Writing book reviews	13	Conceptual use
Massive online courses	29	Instrumental use

Very unlikely valorisation activities in HASS disciplines are patenting, starting spin-offs and making concrete products (interviewees 3, 7, 8 and 15).

4.5.2 Type of knowledge use

To organize and understand why some HASS valorisation activities are more present than others, they can be categorized in different types of application: (1) conceptual use (changing understanding and general enlightenment), (2) political use (supporting policy measures) or (3) instrumental use (making/contributing to a product) (Cherney, 2015; Olmos-Peñuela et al., 2014b; Ward et al. 2009). The valorisation activities in table 3 are attributed one of the three categories. In line with table 3, interviewees argue that

conceptual and political use are equally dominant in HASS (interviewees 8, 14 and 15), whereas the latter is less common (interviewees 4, 15 and 16). However, the dominant type of use is highly dependent on the discipline. For example, in philosophy, advisory work (political use) is less common, but in turn researchers are very active in developing high school education packages (instrumental use) (interviewees 7, 22 and 26). However, when looking at the sub-discipline ethical philosophy, advisory tasks (political use) are suddenly highly present.

4.5.3 Impact assessment

Besides assessing external funding and subsidy incomes, there are no indicators or measures to assess the impact of valorisation activities. However, a start has been made in the new version of SEP, which includes valorisation as an indicator of research quality. Some interviewees confirm this by arguing that valorisation is increasingly registered (interviewees 2, 8 and 15). Nevertheless, registration of valorisation activities seems, in general, not yet operational in research departments and universities. Also, registration copes with issues such as lack of strict regulations (interviewee 28) or technical problems with implementing a registration system (interviewee 22).

One relevant notion for measuring the impact of valorisation in HASS disciplines is made by interviewee 19. He argues that impact of research projects and consortia should not merely be measured by the amount of funding that is yielded. Namely, he argues, this creates a perverse dynamic, in which researchers choose the projects in which they yield money, instead of projects that have a high societal impact. Moreover, HASS projects often need less money (interviewee 12), which makes that using funding as an impact measurement causes skewed interpretations of research impact.

4.5.4 To sum up

The most important HASS knowledge transfer activities are public lectures, advisory, giving trainings, media appearances and writing popular books or articles. In line with that, the types of use of HASS knowledge are predominantly conceptual (lectures, books, media appearances) and political (advisory, giving trainings). Valorisation registration systems and impact assessment of valorisation in Dutch universities are in their infancy.

4.6 Additional issues around HASS valorisation

During the interviews some additional issues emerged that did not fit under one of the five components of knowledge transfer of Ward et al. (2009). Therefore, these issues are discussed in this chapter.

4.6.1 Comparison of valorisation in HASS with valorisation in STEM

Although it is not the purpose of this research to compare HASS with STEM, it could give some insights in the position of HASS compared to STEM in valorisation.

A majority of the interviewees discussing the difference between HASS and STEM regarding valorisation, argued that valorisation in HASS does not lack behind valorisation in STEM (interviewees 4, 7, 8, 9, 11, 14, 17, 16, 19, 23 and 24). Almost all of these interviewees argue that HASS valorisation has a totally different character than STEM. Interviewee 19 answered

the following to the question whether he thinks HASS valorisation lacks behind STEM valorisation:

“Yes and no.” ... “Yes, if you talk about practical implications and applications. For example, actual application and developing new technology and that kind of stuff. But I think that a very important function of disciplines like philosophy and sociology is contribution to the societal debate. And that is a lot harder to measure and less tangible, but very important. So when I look at one component, contribution in media, to fair debate, I dare to say we are very much ahead.”

This statement is taken even further by interviewee 8, who suggests that HASS might also be ahead of STEM when looking at societal impact in general.

In contrast to impact, it seems that HASS valorisation does lack behind in raising funding for their valorisation projects (interviewees 2, 5 and 22). It is, however, important to realize that HASS projects need less funding to do their research (interviewee 12). A newspaper article may be read by 100.000 people, thereby potentially having a major impact on a societal issue, and it ‘only’ cost the researcher a couple of work hours.

A big difference between HASS and STEM valorisation is that STEM valorisation often results in products, applications and spin-offs, which have a solid business model behind them. This simple and profitable appearance of STEM valorisation appeals to people, which makes that the perceived impact and usefulness of STEM valorisation is higher than that of HASS valorisation (interviewee 19).

4.6.2 Valorisation and scientific integrity

Researchers understand that the role of science in the context of the 21st century is changing, and they are willing to talk about the interpretation of this role (interviewee 19). Also, valorisation and science do not necessarily collide. Interviewee 8 argues:

“Gradually we can explain to each other and ascertain that it (valorisation) does not necessarily compromises the integrity (of research in general).”

Nevertheless, several interviewees stress the importance of fundamental research next to applied research (interviewees 12, 13, 14, 19 and 25). They argue that researchers should have the freedom to choose a subject of their interest, without being forced to contribute to society (interviewee 12). Moreover, fundamental science that is not affected by short term valorisation goals, can be very valuable to society in the longer run (interviewees 13 and 30). As interviewee 13 argues, formal grammar rules that were invented by language studies have been the basis for the first higher programming languages in informatics. Interviewee 14 argues that sometimes politics are ignorant for the longer term effect and value of scientific knowledge. Charging science too much with short term valorisation goals negatively affects its integrity (interviewees 20 and 30).

4.7 Stimulating HASS valorisation

The interviewees were asked how they think valorisation should be stimulated. Numerous suggestions were made, which can be roughly categorized in bottom-up stimulation and top-down stimulation. Both are discussed below.

A lot of interviewees propose a bottom-up stimulation of valorisation (interviewees 16, 23 and 25). The main argument is that researchers do not like to be forced into something. Thus, the intrinsic motivation, that is already present, should be stimulated and facilitated (interviewees 12 and 25). In concrete terms, this means that time and money should be made available for researchers to do valorisation projects (interviewees 18 and 26). Also, there should be support for valorisation, to help with specific questions, learn specific skills and take away the fear of interaction with external parties (interviewees 8, 19 and 23). The valorisation task should not be the responsibility of the individual, but the research group's responsibility (interviewee 11). In this way the valorisation activities can be attributed to those researchers that are motivated to do them. However, interviewee 20 foresees problems when making valorisation a group responsibility. Since the reward system is based on research effort, researchers want to focus on research and publishing articles. According to interviewee 20, involuntary assignment of valorisation tasks to researchers would therefore totally destroy the research group dynamic. A solution, he suggests, is employing people that are responsible for valorisation of a group.

Most importantly, there should be a focus on increasing awareness about valorisation (interviewees 8, 16 and 28). This includes workshops, courses, presentations and meetings to increase awareness that valorisation is intrinsic to conducting research (interviewees 12 and 27) and that valorisation has a broad definition that covers activities that researchers already perform (interviewees 16 and 22). This creates a wider supported appreciation of valorisation among researchers and opens up their minds to the possibilities that valorisation brings.

Top-down initiatives are also suggested. A suggestion that is made by interviewee 25 and 26, given the current negative reputation of the term valorisation, not to stimulate valorisation in its current discourse. Interviewee 25 says:

“And you don't have to call it valorisation course. I wouldn't call it that. You have to be tactical, a bit strategic.”

Interviewees 18, 22, 24 and 27 suggest some sort of reward system is desirable, for example in job applications and subsidy requests. However, interviewee 18 stresses that this could be detrimental to scientific integrity, since research assessment would rely less on scientific value. Some concrete suggestions are also made. Interviewee 2 stresses the importance of storytelling. That is, framing the research in an interesting way to make the research appealing to the society and external parties. Furthermore, valorisation should be arranged for each faculty, or discipline, individually, since their valorisation processes have their own character (interviewee 2, 3, 5 and 14). Interviewee 12 suggests to have researchers write a 'layman abstract' for each scientific article that gets published, to reach external parties. Interviewee 19 suggests that the Netherlands can learn from the way in which Great Britain measures HASS valorisation. In the so called Research Excellence Framework (REF), which is

used to assess universities, there is an impact paragraph, which counts for 25% of the universities' assessment. This paragraph contains qualitative case studies, which are:

"A good story, with strong evidence about what the impact is on different levels. Social, economic, on the environment, those kind of things." (interviewee 19)

Interviewee 30 has a somewhat sceptic view of stimulating valorisation. He advocates for a more complex understanding of the value that science brings to society. For example, because of the multidisciplinary character of societal problems, it is too simplistic to give an individual researcher the responsibility for valorisation. In contrast, the responsibility should be that of the research group or -institute and disciplines must co-operate in valorisation goals for a robust and lasting contribution to society. At the same time, there must be an awareness among policy makers that science often has an indirect contribution and is not made to directly solve societal problems (interviewee 30).

5 Conclusion

This study employed an exploratory research design to answer the questions of why and how valorisation in HASS emerges in the Netherlands. When taking the broad definition that the Ministry of OCW holds, valorisation is and has been broadly present in most scientific disciplines for a long time.

In answering the question of how valorisation emerges, the following has been found. The main types of use of HASS knowledge are in societal debates, in advisory roles and, to a lesser extent, also in the form of products. Dominant forms of valorisation activities are public lectures, all sorts of media appearances, part-time appointments in (advisory) boards or committees and collaborative research.

This study also found several reasons that explain why HASS valorisation emerges. There are different reasons for researchers to pursue valorisation activities, such as personal motivations, the possibility to get access to data or research objects, the applicable characteristics of the knowledge that is produced, disciplinary norms and habits, and long standing relations with societal parties. More recently, valorisation has also become more relevant to obtain additional funding from societal parties, since governmental funding has steadily decreased in the last 15 years. The decrease in funding is part of the government's policy to link science to innovation and gradually shift the responsibility for research funding to societal partners. Important is the initiation of the valorisation program in 2010 by the Ministries of Economic Affairs and Education, Culture and Science, which has resulted in a number of structural changes in science policy that enhance valorisation, but also increased the awareness of the term among researchers.

However, there are some conditions that negatively affect HASS valorisation in particular. Politics provided no clear guidelines about how to fulfil the valorisation task. This lack of clarity about the definition and the completion of the valorisation task has led to confusion among researchers, especially in HASS disciplines that have no obvious link to society. Furthermore, valorisation support in most Dutch universities is designed for commercializing knowledge and there is little guidance for non-commercial HASS valorisation. As a result, researchers may be unaware of the valorisation possibilities or afraid that the integrity of their work is infringed. Another problem for HASS is politics' implicit preference for economic valorisation. This has caused a negative reputation of valorisation among a lot of HASS researchers, since a lot of HASS research has little or no commercialization potential.

To conclude, this study found that the undervaluing of HASS valorisation is indeed to a certain extent present, both by policy makers, the university, and researchers themselves. However, this undervaluing is only true in the context of the widespread economic understanding of valorisation. When valorisation is defined in a broad sense (i.e. economic *and* social impact), valorisation is and has been an integrated part of HASS research for a long time and does not lack behind STEM valorisation. However, the fact that HASS valorisation appears to be abundant does not mean that HASS valorisation is entirely unaffected by the economic discourse in which valorisation is placed. A commercializing stance on valorisation causes (1) valorisation to have a bad reputation among a part of the HASS researchers, results in (2) less support for HASS valorisation in the university, may (3)

disregard the indirect effect on society that HASS valorisation has, and (4) endangers valorisation in HASS disciplines that have difficulties to commercialize their knowledge. Moreover, in a broad sense, an economic stance on valorisation puts basic, fundamental science under pressure, since the assessment and funding of science would increasingly be based upon short term, concrete outputs.

Although HASS valorisation seems not to suffer too much (yet) from the economic understanding of valorisation, there is an important task for policy makers and (in particular HASS) researchers to elucidate the understanding of the definition of valorisation, as well as how science can be of value to society. This understanding should include the realization that scientific knowledge and methodology are not created to provide direct solutions to societal problems. Rather, scientific knowledge provides a deeper understanding of the world which indirectly provides contributions to society on the longer term. Also, the understanding of valorisation should consider the fact that some forms of knowledge, like HASS knowledge, have a more implicit, less easily measurable contribution to society. With these propositions in mind a more complex and complete understanding of valorisation can be built and integrated in the science system in the coming years, which preserves the integrity, creativity and independence of science and HASS in particular.

6 Discussion

6.1 Reflection on the current study and suggestions for further research

This study interviewed mainly researchers and valorisation experts that were associated with universities. Only one of the interviewees was working at a semi-governmental body, namely NWO. Since an important part of the analysis concerns Dutch national valorisation policy, the results might be slightly skewed towards the visions and opinions of people that work at the university. For example, the idea that economic valorisation is valued more by NWO and politics, might be the view of a researcher that lingers, out of rancour, in old or limited ideas. In contrast, a policy worker at a ministry would soundly argue that non-economic valorisation is actually valued equally. Nevertheless, the fact that also valorisation experts were interviewed, alleviates this issue, since they occupy an intermediate role, giving critique on both researchers and policy makers at the ministry.

A second limitation is the fact that this study only focuses on the Netherlands. The process of HASS valorisation might differ in other countries. However, a thick description of the context in which valorisation takes place, as provided in chapter 4.1, gives the opportunity to compare the situation in the Netherlands to another context. In a similar context, the chance is bigger that the results are transferrable (Merriam & Tisdell, 2015). Future research has to assess whether the proposed knowledge transfer processes are also present in other countries.

Another issue is that some of the concepts of importance in the framework (see table 1, chapter 3.3) were based on a summary that is given by Ward et al. (2009) of all 28 papers that were used to construct the framework. Although the summary enumerated probably the most important concepts, other concepts from the 28 studies were left out, and consequently, also out of this study. Given the exploratory nature of the current study, this is, however, not considered a highly problematic issue. Moreover, the semi-structured form of the interviews allowed the interviewees to bring in their own topics of importance, which assured that the most important topics, according to the interviewee, were never left out. Additionally, a respondent validation with a valorisation expert assured that all the relevant information concerning valorisation was included.

In line with previous literature, this study chose to take the humanities, arts and social sciences as one case. However, the distinction between HASS and STEM disciplines is mainly a historical one. During the research it became clear that different disciplines within HASS have very different characteristics that may advance or detriment valorisation. Therefore, for future valorisation or knowledge transfer studies, a more specific grouping is desirable. For example, a division can be made based on the applicability (theoretical or practical) of a discipline's knowledge. Or, disciplines can be categorized by the type of valorisation they pursue (e.g. knowledge dissemination, contract research or product creation). In this way, a more meaningful and useful distinction can be made to analyse the valorisation processes in science.

Finally, some reflection on the validity and reliability of this study can be made. This study employed different strategies to improve the construct validity (congruence of concepts

with reality), the external validity (generalizability) and the reliability (consistency of results in other research), namely triangulation, respondent validation, adequate engagement in data collection, reflexivity of the researcher, rich descriptions of context and maximum variation in the sample. All of the strategies were employed successfully, thereby assuring both aspects of the validity, as well as the reliability of the research. However, some strategies did not reach their full potential. For example, respondent validation was done by only one respondent. Also, no structural document analysis was conducted, to ensure strong data triangulation. Nevertheless, since the construct validity was also ensured by adequate engagement in data collection and the researcher's reflexivity, the construct validity is considered thorough. Furthermore, the reliability is ensured by case triangulation and exploratory interviews. Social research settings cannot be isolated from the world, and are therefore always subject to change (Merriam and Tisdell, 2015). It is therefore not certain, and even likely, that results of future research in other contexts and other time periods will diverge from the results in the current study. Finally, the maximum sample variation was moderately constrained, either because of non-response or snowball sampling (colleagues often work at the same university). The external validity is enhanced, however, by the rich description of context (chapter 4.1), that allows readers of this research to assess whether their context is similar, and therefore whether the results are likely to be applicable to them as well (Merriam and Tisdell, 2015).

6.2 Reflection on the theoretical framework

Ward et al. (2009) state that 'Although we have been able to include these components in a conceptual framework of the knowledge transfer process, their relative importance and applicability is currently unknown' (p7). The following reflection on the theoretical framework of Ward et al. (2009) aims to contribute to the understanding of its applicability and that of the different components in it.

The framework of Ward et al (2009) on the knowledge transfer process was broad enough to cover all information that arose from the data about how and why valorisation emerges. The additional issues in chapter 4.6 are not so much issues that concern the process of knowledge transfer, nor its practical context. Rather, they are higher-level conceptual discussions which the framework did not aim to cover. The components that seemed to resonate most with the interviewees were analysis of context (443 text references), problem identification (314 text references) and knowledge development and selection (219 text references). The components knowledge use (120 text references) and knowledge transfer activities and interventions (86 text references) were mentioned less by the interviewees. Figure 4 represents a hierarchy chart, created with NVivo, of the relative importance of the components and their containing categories, based on the number of text references for each categorie.

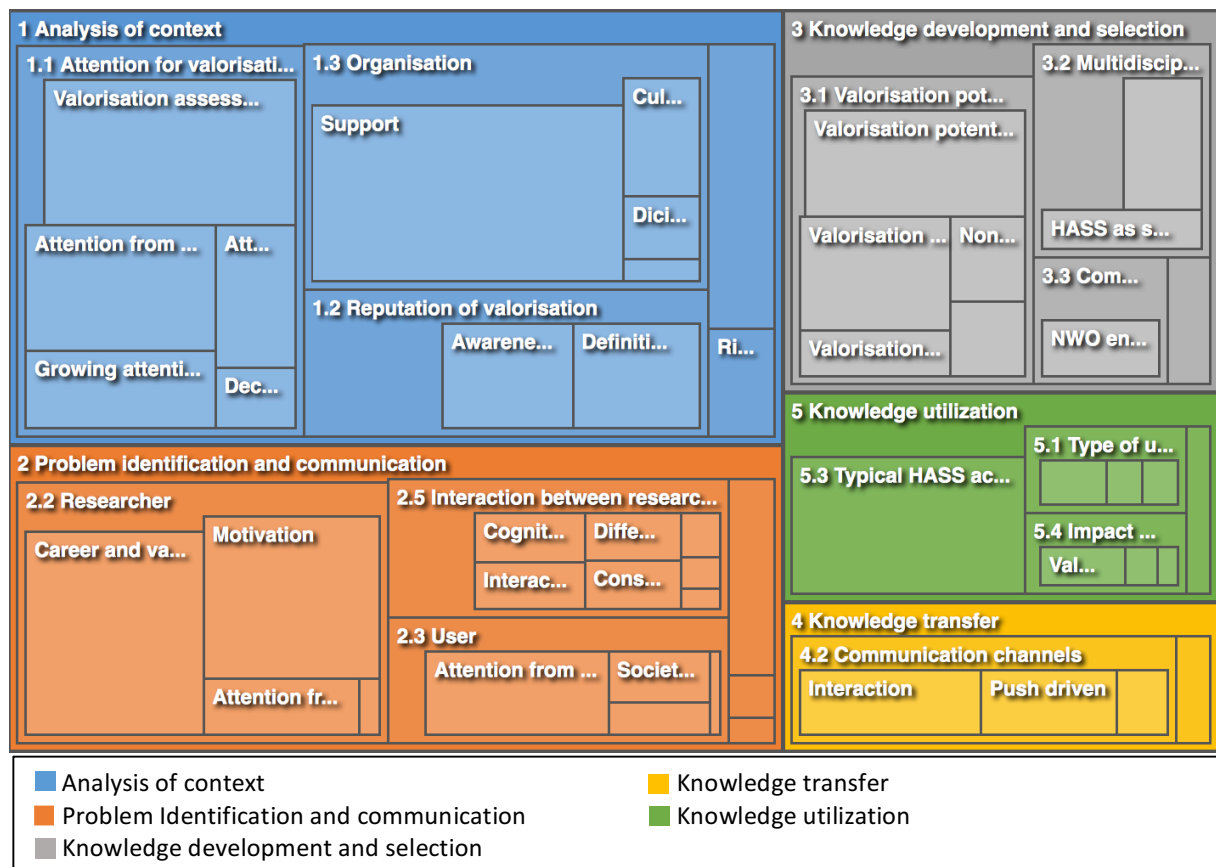


Figure 4. Hierarchy chart of knowledge transfer components (Ward et al. 2009) and containing codes, created with NVivo.

The chart suggests that the ‘analysis of context’ (blue) is the most relevant part of the knowledge transfer process. The large number of text references may be, however, partly due to the fact that valorisation is currently a policy issue in the Dutch science system. Furthermore, ‘problem identification and communication’ (orange) and ‘knowledge development and selection’ (grey) seem important components. Although the components appear in no specific order (Ward et al., 2009), it is likely that ‘problem identification and communication’ and ‘knowledge development and selection’ cover actions that are rather at the beginning of the knowledge transfer process than at the end. Thus, the results of this study suggest that the most important part (i.e. the part that has the most influence on whether and how knowledge transfer takes place) of knowledge transfer lie in the beginning of the process. Components with less references are ‘knowledge transfer activities and interventions’ (yellow) and ‘knowledge use’ (green). This suggests that these components are less important in knowledge transfer, since they yield neither many nor varied information. Moreover, actions in ‘knowledge transfer activities and interventions’ often overlapped with actions in ‘knowledge use’. For instance, transferring knowledge through a news paper article is simultaneously a form of knowledge use. Furthermore, the analysis of the transfer of knowledge is for a large part integrated in the component ‘problem identification and communication’ (the interaction between researcher and user). Therefore, this study suggests to merge the components ‘knowledge transfer activities and interventions’, and ‘knowledge use’ into one (i.e. at least for HASS disciplines), information rich component named ‘knowledge implementation’.

Ward et al. (2009) also state that the framework ‘contains no details about the practical actions which could be associated with each of the components’ (p7). This study proposes a new, improved, conceptual framework (see table 4), including conceptual content, thereby taking in account the merging of ‘knowledge transfer activities and interventions’ and ‘knowledge use’ proposed above. The conceptual content of the framework is essentially a summary of the result section. However, in contrast with the result section, which has a narrative character, it has theoretically distinct and useful concepts. Thus, for example, in chapter 4.1: Analysis of context, paragraphs 4.1.1: *A brief outline of valorisation in the Netherlands* and paragraph 4.1.2: *Increasing attention for valorisation*, are summarized under the concept ‘Political trends’ in the proposed framework (see table 4). To give another example, paragraph 4.2.3: *Problem identification by the user* has been changed to ‘user types and characteristics’ to be useful in the framework. Also, some information that was considered not relevant or useful for the general framework, was left out. For example, 4.3.1: *Knowledge selection in Dutch universities* was left out, since that information is too case specific and therefore not relevant for a more general framework. Similar, 4.3.6: *Difference in valorisation potential between disciplines*, was left out since it did not provide the framework with a conceptual tool to assess valorisation in HASS.

Table 4. Proposition of an enriched conceptual framework of knowledge transfer by Ward et al. (2009).

Components			
Analysis of context	Problem identification and communication	Knowledge development and selection	Knowledge implementation
Concepts			
Political trends	Researchers’ motivations	Applicability of knowledge	Knowledge transfer capabilities
Organization and culture	User types and characteristics	Multi- and interdisciplinarity	Knowledge distribution channels
Reward systems	Collaboration between researcher and user Intermediate organizations Pressing societal issues	Group valorisation and group leader	Activities of knowledge use Impact assessment

6.3 Implications for knowledge transfer theory

As Ward et al (2009) describe, most knowledge transfer models have unjustifiably presumed the knowledge transfer process to be ‘driven by a relatively narrow range of determinants’ (p2). This study shows that, indeed, there is a large amount of circumstances and aspects that may affect the process. Moreover, all these aspects may interact with each other. For example, political knowledge transfer policies may influence a researcher’s motivation for knowledge transfer and hence the researcher’s pursuit of knowledge transfer. This may affect his or her knowledge transfer capabilities, which in turn affects his/her success in cooperating with societal parties etc. Thus, to assume that the knowledge transfer process can be narrowed down to a few determinants seems an illusion. Moreover, the way

knowledge transfer happens has proven to be very much dependent on the discipline that is assessed. This study has tried, nevertheless, to build a framework for HASS that is both comprehensive and parsimonious. Such a framework seems to be a proper reference point for investigating the knowledge transfer process on a more specific level, since it places the results of specific studies in perspective.

A counter intuitive (and therefore perhaps even more important) implication for knowledge transfer theory that emerged from this research, is that the majority of issues around knowledge transfer do not concern the actual transfer or implementation of knowledge, but rather the preceding aspects, like policy, organizational processes and the way in which knowledge is developed. This suggests that knowledge transfer theory should direct its attention to the stages of the knowledge transfer process that precede the actual transfer or implementation of knowledge.

6.4 Practical implications and recommendations for valorisation policy

The findings in this study provide a basis for several recommendations for valorisation practice and -policy. The recommendations are partly based on direct suggestions by interviewees (see chapter 4.7) and statements in the conclusion, and are as follows:

- Politics should develop a distinct and clear definition about what they understand under the term valorisation, and how they expect researchers to fulfil this new task.
- Enhance the awareness of the definition and the possibilities of valorisation among researchers.
- Provide more support to non-traditional and non-commercial valorisation, like media appearances and writing a valorisation paragraph for a subsidy request. For example, by extending the role of technology transfer offices.
- Increase tangibility of HASS knowledge through ‘story telling’ (see chapter 4.7).
- Create space for researchers to pursue valorisation activities, in order for valorisation not to affect their academic career. For example, by temporarily releasing researchers off their everyday responsibilities.
- Make valorisation a group responsibility and loosen the responsibility of the individual.
- Integrate valorisation in academic education, to create early awareness and capability development.
- Create a more comprehensive understanding of how scientific knowledge contributes to society, taking the long term and indirect contributions into account as well.
- Develop a qualitative measurement system for valorisation that is not easily enumerable. An example is a ‘qualitative impact story’ (see Appendix D), that is used in the United Kingdom to measure valorisation.
- In measuring and assessing valorisation, the valorisation possibilities for that specific discipline or sub-discipline should be taken into account.

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Appendix A – Interview questions

General questions

How much attention is paid to valorisation in HASS, in:

- Politics?
 - University?
 - Business?
 - By researchers themselves?
-
- Does HASS lack behind in valorisation compared to STEM?
 - If yes, is that worrisome? Why?
 - Is there a lot of valorisation potential in HASS? To what extent is it realized?
 - What are barriers in HASS valorisation?
 - On what aspects can HASS valorisation improve?

NWO questions (only for the interview with interviewee 14 at NWO)

- How important is valorisation in a NWO subsidy request?
- What criteria have to be met in the valorisation paragraph?
- How successful are HASS researchers in writing the valorisation paragraph?
- Are some disciplines disadvantaged, because they are having trouble to write the valorisation paragraph?
- How is the funding divided between HASS and STEM sciences?

Problem identification

- Where does the problem identification start, for which HASS knowledge is used?
- Who are involved? Government(al) organizations, business, researchers?
- What is the effect of earlier cooperation with external partners on the production of knowledge?
- Are there certain communication channels or systems between users and researchers that are used?
- How important are these systems and channels?

Knowledge development and selection

- Is HASS knowledge easy to valorise?
- In which way is HASS knowledge useful for society?
- Can societal problems be solved with already existing HASS knowledge, or does the knowledge have to be adapted for those purposes?
- Are there significant differences between disciplines' abilities to valorise?
- Does HASS have characteristics that are advantageous for valorisation?
- Is HASS combined with STEM knowledge in valorisation projects?

Context

- What is the role of universities'/disciplinary organization in HASS valorisation?
- Is the universities'/disciplinary organization focused on valorisation?
- Which role does academic identity (scientific vs entrepreneurial) play in HASS valorisation?
- Which role do disciplinary norms and values play in valorisation?
- What is the effect of earlier experience of researchers with valorisation activities?

- What is the role of research group size in valorisation?
- And multidisciplinary of the research group?
- What is the role of top researchers in valorisation?
- What is the role of group leaders in valorisation?
- How strong is the motivation for valorisation among HASS researchers?
- Is a fruitful environment, like a science park, important for HASS valorisation?

Knowledge transfer activities and interventions

- How is knowledge transferred to society?
- Which channels and possibilities are employed to send knowledge into society?
- Is marketing an important tool for knowledge transfer to society? Why?
- Are 'local champions' (individuals with success in valorisation) an important tool for transferring knowledge to society? Why?
- Is knowledge transferred by means of dialogue and interaction with societal parties?
- What is the role of intermediary organizations or persons in valorisation?

Knowledge development and selection

- Which valorisation activities are typical for HASS?
- Which valorisation activities are not likely to arise from HASS?
- Knowledge can be used for one of the following three purposes:
 - 1) general enlightenment (increase thinking and understand the world)
 - 2) supporting political programs and business strategies
 - 3) applied directly (e.g. educational method)
- Which of these types of knowledge use is present in HASS?
- Is sustaining, monitoring and impact assessment of valorisation employed in HASS?

Appendix B – List of interviewees

Interviewee	Function	City or Organization	Date of interview
<i>Holistic case</i>			
Interviewee 1	Business Development Manager	Amsterdam	04-05-2016
Interviewee 2	Coordinator Knowledge and Technology Transfer Office	Nijmegen	21-06-2016
Interviewee 3	Valorisation Manager	Maastricht	02-05-2016
Interviewee 4	Holding Company Director	Groningen	14-06-2016
Interviewee 5 and 6	Valorisation program manager + Knowledge transfer worker	Utrecht	09-05-2016
Interviewee 7	Knowledge Broker	Leiden	25-07-2016
Interviewee 8	Business Development Manager	Amsterdam	23-08-2016
Interviewee 9 and 10	Knowledge transfer expert + Knowledge transfer expert	Utrecht	10-02-2016
Interviewee 11	Co-founder of a research and strategy firm that stimulates societal engagement in complex issues	Amsterdam	01-09-2016
Interviewee 12	Valorisation manager	Utrecht	06-09-2016
Interviewee 13	Professor in digital humanities and HASS expert	Amsterdam	09-09-2016
Interviewee 14	Senior Policy officer	NWO	13-09-2016
<i>Sociology</i>			
Interviewee 15	Professor in sociology	VU University	17-06-2016
Interviewee 16	PhD in sociology	VU University	26-07-2016
Interviewee 17	Professor in sociology	Utrecht University	28-06-2016
Interviewee 18	Professor in sociology	University of Amsterdam	09-08-2016
Interviewee 19	Professor in sociology	University of Amsterdam	27-08-2016
Interviewee 20	Postdoc in sociology	Utrecht University	27-09-2016
Interviewee 21	Professor in sociology	Utrecht University	11-10-2016
<i>Philosophy</i>			
Interviewee 22	Professor in philosophy	Radboud University Nijmegen	27-07-2016
Interviewee 23	Professor in philosophy	TU Eindhoven	12-08-2016
Interviewee 24	University Lecturer in philosophy	Leiden University	16-08-2016
Interviewee 25	Associate professor in philosophy	Utrecht University	15-08-2016
Interviewee 26	PhD in philosophy	Leiden University	18-08-2016
Interviewee 27	Associate professor in philosophy	Utrecht University	27-09-2016
Interviewee 28	PhD in philosophy	Leiden University	02-09-2016
Interviewee 29	Professor in philosophy	Utrecht University	12-09-2016
Interviewee 30	Professor in philosophy	Utrecht University	26-09-2016

Appendix C – Summary of text references by interviewee

Interviewee number	Number of text references	Number of different codes used
<i>Holistic case</i>		
Interviewee 1	45	18
Interviewee 2	120	50
Interviewee 3	47	24
Interviewee 4	31	25
(failed recording: summary of conversation was made)		
Interviewee 5 +6	50	26
Interviewee 7	99	48
Interviewee 8	51	33
Interviewee 9 +10 (summary of conversation was made)	9	8
Interviewee 11	52	32
Interviewee 12	49	30
Interviewee 13	39	23
Interviewee 14	43	26
<i>Sociology</i>		
Interviewee 15	80	46
Interviewee 16	81	45
Interviewee 17 (interview conducted over email)	15	12
Interviewee 18	35	28
Interviewee 19	64	33
Interviewee 20	36	26
Interviewee 21 (interview conducted over email)	18	15
<i>Philosophy</i>		
Interviewee 22	64	38
Interviewee 23	43	24
Interviewee 24	42	26
Interviewee 25	36	28
Interviewee 26	32	23
Interviewee 27	61	35
Interviewee 28	37	25
Interviewee 29	48	28
Interviewee 30	27	15

Appendix D – Example of a qualitative impact story as demanded by the Research Excellence Framework that is used in the United Kingdom to assess research quality

<p>Child Support Research and Policy Impacts (University of York)</p>
<p>1. Short summary of the case study</p> <p>The Child Support Policy directed that all lone parents in receipt of social security benefits were automatically referred to the Child Support Agency. The policy was set up without any previous research and proved to be seriously flawed, failing in its objective to make more men pay and pay higher amounts of child maintenance. The cost of failure was high with arrears and IT system costs totalling £4.5 billion by the late 2000s.</p> <p>The body of research we produced had a direct influence on the Government policy making process, resulting in the disbanding of the CSA in 2006-07 and the return of decision-making process about child maintenance back into the hands of separated parents. This has had a significant impact on all separated parents who use the service and their relationships and may result in more parents making willing payments of child maintenance.</p>
<p>2.Underpinning research</p> <p>The underpinning body of research was:</p> <ul style="list-style-type: none"> • The first ever national survey of Non-resident Fathers in Britain undertaken by Bradshaw (1993-current Professor), Skinner (1995 Research Assistant, [1996-98 PhD student], 1997-99 Research Assistant, 1999-2000 Research Fellow, 2000-08 Lecturer, 2008-current Snr Lecturer), Stimson and Williams between 1995-1999. This was funded by the ESRC as one project (L315 25 3005) in the Population and Household Change Programme. This study was unique and of high quality, gaining a sample of over 600 non-resident fathers. • A qualitative in-depth study of non-resident fathers exploring the processes through which fathers might make a commitment to pay child maintenance undertaken by Skinner. This was funded by the ESRC as a PhD for Skinner (1996-1998). • A secondary Analysis of the Families and Children Study undertaken by Skinner and Meyer (visiting Professor from University of Wisconsin) summer of 2006. Not externally funded, but supported by the Department of Social Policy and Social Work. The analysis found that child maintenance payments helped low income mothers; even though only a minority actually received any child maintenance, when they did it made up on average between a third and half of their total income package. This research indicated to policy makers that it was appropriate for the new policy framework to focus on ways to make child maintenance payments reliable among low income lone mother families. • An international survey of child maintenance experts from 14 countries to examine and compare their child maintenance systems. Undertaken by Skinner, Bradshaw and Davidson (2005-current Research Fellow) in 2006. This was funded by the DWP and informed the redesign of child maintenance policy taking place between 2006 and 2007. It was an expanded and updated study of the original work done by Anne Corden (1993-current Snr Research Fellow) in our Social Policy Research Unit 1999. <p>Summary of research findings: Prior to our research, no one knew how many non-resident parents (NRPs) there were, how</p>

many children might be affected by the Child Support Policy or in what ways. Our national survey of non-resident fathers estimated the size of this population and described the patterns of child maintenance payments, the provision of other forms of financial/social support and the factors that might affect provision. The evidence we gathered showed that the policy principles were out of line with the way separated parents operated their financial obligations and family relationships. Financial obligations were entwined with social and emotional bonds with children. Where these did not exist (or were thwarted) the enforcement of an obligation to pay cash to the other parent maintenance was unacceptable to NRP and seen as being unfair. Unlike the stereotype of feckless disinterested fathers embedded within policy, our research showed that post-separation obligations were fraught and complex. It was difficult for parents to work out the 'right thing to do'; they needed supportive policy making not stigmatising.

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4. The contribution, impact or benefit

The Child Support Policy was set up without any previous research and insisted that child maintenance should be enforced regardless of the state of family relationships. Policy made no allowance for the complex interconnections between the social/emotional relationship with children and the other parent and the financial obligations of non resident parents. Our research highlighted this was extremely important and integral to making commitments to pay maintenance. Consequently, the CSA failed in its objectives to make more men pay and pay

higher amounts of child maintenance. This was despite, and because of, numerous new Acts and changes in operational procedures that further complicated an already unacceptable policy framework to NRPs. The costs of failure was high; in 2005-06 every £1 of child maintenance collected cost the state £0.78p, arrears reached £3.5 billion, and the total costs of the IT systems were around £1 billion (NAO 2009). The policy failed to increase the proportion of lone parents receiving child maintenance (which remained about a third 1991- 2006). The negative impact on separated families' relationships is not quantifiable, but plenty of evidence suggested that the CSA increased parental conflict.

The research we produced in 1999 had a direct influence on the Government policy making process. The CSA was disbanded in 2006-07 and child maintenance decisions were moved back into the hands of separated parents, this was a massive sea-change affecting the whole population of non-widowed lone parents, the other parent (non-resident) and all dependent children. In 2008, the Office of National Statistics estimated that there were 3.3 million dependent children with a non-resident parent in Great Britain. These parents were now free to choose whether or not to use the 'child maintenance collection and enforcement system' (CMEC) or seek advice through their 'Child Maintenance Options' service. The options service is more conciliatory in approach and the stigmatising has gone. Returning decisions to parents was one of the key recommendations from our earlier research evidence; policy needed a non-stigmatising and more helpful approach to increase the number of willing payers of child maintenance (Bradshaw et al 1999).

The influence of our research affects all separated parents and consequently all of the dependent children who live with one non-widowed lone parent, estimated at 30% of all dependent children in the UK. Its influence is shown in three ways: 1) Skinner was invited by both voluntary sector organisations and policy makers to join an exclusive policy network to debate the new policy framework and the future direction of the DWP's research programme; 2) our recommendations were adopted as policy; 3) our research was used by voluntary organisations to influence both the new policy design in these debates and the approach taken by the Child Maintenance Options service.

Skinner's involvement included:

- Invited by the DWP to a private 'Child Support Policy Academic Research Seminar', 2006.
- Invited by One Parent Families to five exclusive high-level policy seminars to inform Sir David Henshaw's review on Child Support Policy, 2006
- Invited by Fathers Direct to a private meeting with Sir David Henshaw to discuss the Child Support Policy Review, Cabinet Office, 2006.
- Research (Skinner and Meyer 2006) was quoted in the White Paper (DWP 2006:105).
- Appointed as Specialist Advisor to the House of Commons Work and Pensions Committee, Investigation of Child Support Reforms, January - March 2007. (HC 219, 2007).
- Invited by the Child Maintenance Re-Design Team of the DWP to a private seminar entitled '*Child maintenance redesign: research seminar*', CIPFA, 2007.
- Invited to give a paper on '*Understanding 'willingness to pay' Child Maintenance*' at a high-level policy seminar chaired by Lord Archy Kirkwood - 'Relationship Breakdown and Child Maintenance, 2008, organised by One Parent Families.

The research work of Skinner also influenced the DWP's child maintenance research plans as follows:

- DWP funded Skinner et al to conduct a new international research project to inform the new policy redesign (Skinner et al 2007; DWP 2007).
- Skinner was employed as academic consultant for the DWP's first ever *Quantitative Survey on Relationship Breakdown*, 11/2006 – 12/2007 (Wikeley et al 2008).
- Skinner appointed as expert consultant to CMEC's first research project '*Promotion of Child Maintenance: Research on Instigating Behaviour Change*' 2009 (report pending).

Skinner also employed as academic consultant for the DWP's first baseline survey of separated parents under the new policy framework, November 2009-Feb 2010.

5. References to corroborate the contribution, impact or benefit

Contacts were provided at the following user/beneficiary organisations:

Gingerbread

NatCen - (Head Office)

House of Commons Work and Pensions Committee

DWP (2006) *A new System of Child Maintenance*, Norwich: TSO (see pages 94 and 105).

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Wikeley, N. Ireland, E. Bryson, C. and Smith, R. (2008) *Relationship separation and child support study* Department for Work and Pensions Research Report No 503, Norwich: TSO.

Bradshaw, J. and Skinner, C., 'Memorandum to the House of Commons Social Security Committee' in House of Commons, HC 798, *The 1999 Child Support White Paper*, Social Security Committee Tenth Report, Session 1998-1999, London: The Stationary Office, pp. 133-139, September 1999.

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<http://www.thepolitician.org/articles/putting-children-545.html>

Source: Research Excellence Framework (2016).