

The New Artisan and engineering know-how

Conference presenter: Stephen Mears

Role: Doctoral candidate,
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Place: Leura, NSW, AUSTRALIA

Acknowledgement of Country: I would like to Acknowledge the Gundungurra and Darug people who are the traditional custodians of this land. I would also like to pay respect to Elders both past and present. I extend that respect to Aboriginal and Torres Strait Islander peoples here today.

Research team: Stephen Mears (USQ), Dr Steven Goh (Principal Supervisor, USQ), Dr Lee Fergusson (Associate Supervisor, USQ), Dr Philipp Grollmann (External Associate Supervisor, BiBB) and Ms. Katrin Gutschow (External affiliate, BiBB)



Introduction:

Artisans are well represented throughout history. The traditionalism bestowed by their craft(s), afforded the artisan a position within society as crafts-person, innovator, entrepreneur, influencer and spokes-person. In this sense, they formed a collective of knowledge makers.

This presentation provides an alternative view to knowledge making by presenting an argument to analyse the activity and actions undertaken by the artisan, together with the tools and methods used to carry out this action. This form of know-how is represented in historical artefacts and engineered through pictorial, tacit and semiotic perspectives.

A narrative inquiry comparing static images (as artefacts) from The house books of the Nuremberg Twelve Brothers Foundations to a written translated text entitled, “The brain gets better through intensive use” (2013) will be conceptualised. The results of the inquiry suggest, a pragmatism view towards knowledge sharing and learning in evaluating phenomenon complexity (as know-how), has as much significance today for the new artisan, as it did then.

Background:

This presentation forms part of doctoral research undertaken at the University of Southern Queensland, Australia in conjunction with the Federal Institute for Vocational Education and Training (BiBB), Bonn, Germany.

Master craftsmen or ‘Meisters’ foster the development and ongoing performance of the German craft sector (Handwerk). As part of the German Mittelstand (small to medium enterprises), the craft sector contributes to innovation initiatives and builds upon skill awareness needed to drive German industry and consequently, economic growth. As an integral asset comprising of ‘older adults’, the craft sector, has its roots firmly linked to ‘German artisanship’. Meisters, can be seen as artisans whose skills, tools and know-how have been developed over the course of German history.

In its current status, the craft sector and the German Mittelstand in general, face challenges in attracting and retaining apprentices as part of its dual training system. The research associated with this presentation highlights the need to engage an aging workforce with “all” possible modes of communication – semiotic, tacit, pictorial and linguistic. Otherwise, as ‘knowledge assets’, they risk becoming obsolete.

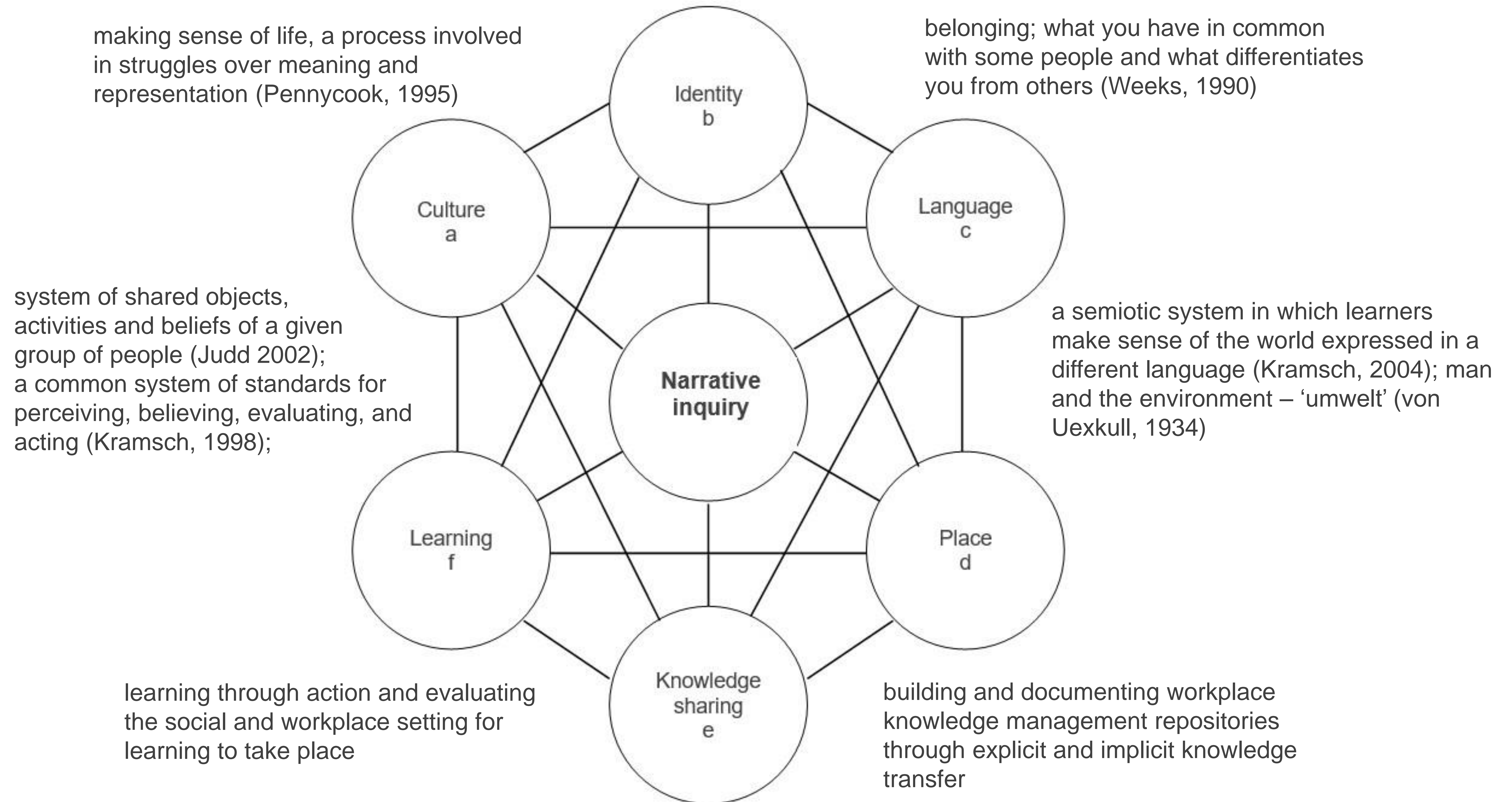
Research question(s):

RQ1. How do traditional artisans represented in static images from The house books of the Nuremberg Twelve Brothers Foundations reflect upon their perspective of know-how;

RQ2. What comparative observations can be drawn between this perspective of know-how to the view advocated in the written translated text entitled, “The brain gets better through intensive use” (2013).

Methods:

Schematic of contextual mapping with key concepts relevant to narrative inquiry



Source: Schematic developed from McKinsey 7S framework (1980). The narrative inquiry is a system of interconnected values. Culture, identity, language concepts developed from Nunan and Choi (2010).

Methods:

RQ1. Representation and lived experience: document of artisan's perspective



- narrative mode of analysis;
- variety of visual rhetoric genre;
- thematic coding of event (QDA Miner Lite);
- disconnected cultural elements become coherent through pictorial communication;
- semiotic modes and codes;
- event and actions (activity) are connected;
- tools act as signs to facilitate action;
- tacit validates explicit message

c.1455

Permission: Historisch-Wissenschaftliche Stadtbibliothek

Category: Brothers

Jobs: peck (baker)

Occupational group: food manufacturing industry

implements: Oven; bread spatula

Description: The baker is standing in front of his oven, which has a low extension on the left, and is about to take the finished loaves of bread out of the oven with a long spatula. Below in front of the stove lie coals, partly scattered on the floor.

Methods:

RQ1. Representation and lived experience: document of artisan's perspective (cont)



- narrative mode of analysis;
- variety of visual rhetoric genre;
- thematic coding of event (QDA Miner Lite);
- disconnected cultural elements become coherent through pictorial communication;
- semiotic modes;
- event and actions (activity) are connected;
- tools act as signs to facilitate action;
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Permission: Historisch-Wissenschaftliche Stadtbibliothek

Category: Brothers

Jobs): beck (baker)


Occupational group: food manufacturing industry

implements: Oven; Bread slider (baking shovel)

Description: Stoltz stands in his baking room and uses the bread scraper to take a piece of brown bread out of the oven. A finished bread is already on the bench. In front of the oven there is a tub with lye and a brush with which to spread the dough.

Methods:

RQ2. Representation and lived experience: validation of artisan's perspective

line	para.	Genre – generic structure	The text – translated using Google Translate (German to English)	Genre – rhetorical structure	Patterns of cohesion	Notes
1		Headline	BIOLOGICAL AGE			Text type:
2	1.	By-line	"The brain gets better through intensive use"	<i>narrative:</i>	Anaphoric reference: ^A	<u>Narrative:</u> tells a
3				styling used to	Cataphoric reference: ^B	story as a
4	2.	para. 2:	Why companies should not only propagate lifelong	persuade and	Exophoric reference: ^C	conversation
5		<i>orientation</i>	learning, but should live it, ^A explains neurobiologist	interpret	Homophoric reference: ^D	<u>Expository:</u>
6			Martin Korte in an interview.	within	Comparative reference: ^E	scientific as the text
7	3.	Cover image		discourse as to	Bridging reference: ^F	is based on
8				the social and	Repetition: ^G	evidence obtained
9				economic	Synonymy: ^H	from other sources
10				factors that	Antonymy: ^I	(premises);
11				need	Hyponymy: ^J	<u>Argumentative:</u> the
12				consideration	Meronymy: ^K	viewpoint tries to
13					Collocation: ^L	avoid social
14				para. 2 –	Expectancy relations: ^M	inequity by
15				definition	Lexical bundles: ^N	elevating the status
16			Martin Korte is a neurobiologist at the TU Braunschweig		Conjunction: ^O	of an economically
17	4.	Cover image	and is primarily concerned with the mechanisms of		Substitution and ellipsis: ^P	disadvantaged
18		title	learning and memory processes.			group in society

The text supports the idea that learning (albeit lifelong) is a continuous process in making things visible (Prior, 2008). Learning through a lived experience undertaken over the course of a lifetime builds a knowledge repository. A pictorial, semiotic and tacit perspective gives weight to sharing this knowledge.

^AFull version of discourse grammar will be included in doctoral manuscript.

Methods:

RQ2. Representation and lived experience: validation of artisan’s perspective (cont)

19				para. 5-14 –	
20			Factor A: Do older employees ^G have other strengths than	Drifting in and	
21	5.	Para. 5-14	younger ones? ^C	out of <i>ethos</i>	
22		body		(persuasive	
23			Martin Korte: Elders ^G can have a tremendous amount of	argument);	
24	6.		<u>knowledge and experience</u> , ^M and ^O know much more about	persuasion	
25			what aspects of a workflow they ^{A,G} need to be aware of, or	used	
26			what information is really relevant - provided they ^{A,G} are	throughout	
27			active and committed to their job. In general, older	text to support	
28		1. 28-34	people ^J do not react so affectively, so they ^{A,G} have better	this –	
29		<i>complication</i>	control ^J , and ^O are more loyal to their own company ^J .	examples	
30		<i>(positive)</i>	Overall, they ^{A,G} have a higher <u>emotional intelligence</u> ^{J,M} -	1. 24-34; 46-	
31			which means ^O they know a lot about themselves ^J , but also	52; 69-75	
32			about others, ^{E,J} which is of <u>blatant importance</u> ^{L,M} in		
33			working together ^{J,K} in the workplace.	<i>metaphor:</i>	
34				used in 1. 28-	
35			Are older people the better employees? ^C	34; older	
36	7.			people are	
37			It depends. If you let young students compete against 65-	being	
38	8.		year-olds ^I , statistically the younger ones ^I always <u>win</u> ^P . But	associated as a	
39		<i>evaluation:</i>	if you take a closer look at the older volunteers ^{I,K} , you	‘safe choice’	
40		para. 8	find that they ^{A,G} often fall into two distinct groups. ^K One	for	
41			group can continue to solve the tasks set at the level of the	employment.	
42			younger ones, the other ^I clearly falls off ^F . It includes		
43			people who ^{A,G} have not learned all their lives, who ^{A,G}		

Methods:

RQ2. Representation and lived experience: validation of artisan's perspective (cont)



The new artisan?

The text[^] alludes to the power demonstrated between government (BA) and industry (Mittelstand) in support of the older worker (agent-patient). As the German Mittelstand is the economic engine for German industry and its demographic is skewed towards older-age workers as business owners, this position is substantiated (patient-agent) ((BMWi), 2014; Paltridge, 2012).

[^]Full version of discourse grammar will be included in doctoral manuscript.

Participants:

Handwerk (skilled craft) Areas: (ZDH, *The skilled crafts in Germany 2018*)

Building and interior finishes trades

Electrical and metalworking trades

Woodcrafts and plastic trades

Clothing, textiles and leather crafts and trades

Food crafts and trades

Health and body care trades as well as the chemical and cleaning sector

Graphic design

Results:

- The research has strengthened the ‘German argument’;
- Both industry and science institutes in Germany confirm the importance in addressing learning through implicit means as building awareness and furthering innovation at a strategic level;
- Data reveals Germany’s strength in apprenticeship numbers across its Mittelstand is being impacted by changing global volatility—giving rise to shifts in skill sets and capabilities (Deissinger, 2015; FHM, 2013). New modes of communication are required to attract and retain younger people;
- Tacit, pictorial and semiotic perspectives as modes of communication become attributes of the artisan’s lived experience and are integral to the experience lived by the ‘new artisan’;
- Engineering a systems approach is necessary to embrace the implicit perspective together with explicit view to building and sharing knowledge across the organisation;
- A pragmatism paradigm affords a multi-faceted approach in understanding phenomenon complexity.

Summary:

- This presentation forms part of a larger research effort towards the award of a doctorate's degree by publication undertaken at the University of Southern Queensland, Australia (current);
- Artisanship and its historiography is rich in content. This content is enhanced through some of the communication modes presented and clearly demonstrates the importance in engineering a system to 'fully engage' the new artisan as knowledge asset;
- The research being undertaken not only has relevance to Germany's industry (present and future) but also to a country such as Australia;
- A manuscript for publication together with a chapter dealing with artefact analysis within the dissertation will include data from this presentation.

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[^] This reference list is only a sample and is incomplete. References (including recent 5 years) will be provided on submission of the manuscript to the publisher.