

A Perceptual Architecture of Intercultural Competence

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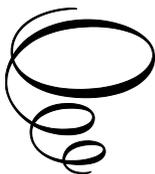
*Avenues for Tracking
Cultural Expertise*

By

Birgit Breninger

Prefaced by Georg Northoff

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A Perceptual Architecture of Intercultural Competence:
Avenues for Tracking Cultural Expertise

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**To all who have
crossed oceans,
walked through fires
and have risen to higher skies
unleashing passions into lives**

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Illustrations by Elfriede Breninger

PREFACE

What is culture? What is competence? In her remarkable book, Birgit Breninger aims to address the big question. But even more, she wants to go beyond the traditional dichotomies, cultural x vs culture y. She strives for inter-cultural competence. On a surface level, that seems to complicate rather than make easier her task. Before one can define the 'inter' in 'inter-cultural', one may need to determine what is meant by culture itself. That is the traditional western approach. Slice the whole phenomenon into distinct parts, understand all the parts by themselves, and then put them back to together and you will understand the whole.

Birgit Breninger objects to that. She recruits several lines of conceptual and empirical evidence against such slicing up the whole into parts. Rather than obtaining the whole by adding the parts, we lose it when slicing the whole into parts. Instead of starting with culture itself and from there understanding the 'inter' of inter-cultural, she takes the reverse route. We need to understand the relationships, the relation between persons to understand the single person itself. Analogously, we need to understand the relationship of cultures, that is the 'inter', in order to grasp what culture is. 'Inter' comes prior to 'intra' – relationship shapes and constitutes cultures and especially our competence of navigating in cultures.

The stubborn spirit may now want to object. Is there anything I can grasp and observe when focusing on the 'inter' rather than the cultures themselves? I can observe different cultures, I can investigate their differences. But their relationship? That seems to be invisible and therefore not amenable to serious scientific investigation. Here indeed we encounter a cultural difference. In the western world, one, due to philosophical heritage, prefer the part as starting point, the 'inter' between parts, that is, their relationship, is secondary to the primary part. Before understanding inter-cultural competence, we need to first investigate culture itself which, in a second step, will make us understand the relationship of cultures, i.e., inter-cultural competence.

Birgit Breninger says 'No' to all of that. She starts from the opposite end, the relationship, the inter, and from there she throws a light on culture and specifically inter-cultural competence. That sounds paradoxical as, from the traditional western point of view, she will not see anything there. She argues the opposite. I can take into view something that is more basic and fundamental than the parts themselves: the relationship out of which the parts emerge as abstraction, as our abstraction imposed upon the phenomenon, i.e., the whole by us as investigator. The focus on the 'inter', the relationship provides a broader more comprehensive framework as it opens a deeper background level which usually escapes our view and perception. Her book unravels such deeper background level in a remarkable way.

What comes into view in such deeper background level? Lets consider the brain as paradigmatic example. Following her focus on 'inter' and relationship, Birgit Breninger traces inter-cultural competence back to the brain. Does this mean she finally abandons her prevailing assumption of the fundamental nature of 'inter' and relationship by something substantial like the brain and its purely intra-neuronal mechanisms? Where the part, the brain itself, is clearly prior to the whole, our perception of the world and its various culture? The traditional western researcher in neuroscience or communication theory may finally sigh some relief: now she is getting to the substance of things, the parts, which she only needs to put together to acquire the whole, the neuronal basis of inter-cultural competence.

But again, Birgit Breninger defies expectation. She conceives the brain and its neuronal states as secondary manifestations of its primary relationship to body and especially the environment. Doesn't need to be first there a brain with its neuronal activity which, in turn, makes possible its secondary relationship with the world? Birgit Breninger goes against this traditional model. And now, surprisingly, she has empirical evidence on her side against traditional dogma. Taking a deep look into recent neuroscientific data and evidence, she shows that the brain's neuronal activity is shaped and constituted by cultural imprinting: the kinds of environments the brain is exposed, shapes its neuronal activity and subsequently affect, emotion, and cognition of the owner of that brain.

This leads us to the surprising conclusion that brain states are not neuronal states. Instead, what we, based on our traditional part-whole dichotomy and dogma conceive to be purely neuronal, is intrinsically neuro-ecological. The brain is not the brain. Instead, the brain is relational constitutes by what I like to describe as world-brain relation. The pattern of the environment, its stochastics and temporo-spatial dynamics shape and constitute the structure and organisation of the brain's neuronal states. Relationship as 'inter' constitutes neuronal states as the 'intra' of the brain. The brain may be located inside the skull. But functionally it is outside the skull, right between body and environment – it is mediator between both which constantly tries to establish relationship between them. The brain 'wants' to be in touch with the environment as that keeps the brain stable and coherent – the statistical structure of the environment shapes the statistical structure of the brain's neuronal activity. Therefore, the brain is not neuronal but intrinsically neuro-ecological.

The traditionalist may still say that all that sounds strange. It defies the logic that the part is prior to the whole, the intra is prior to the inter. But, as we have seen several times in history of science, the logic of the investigator does not always correspond one-to-one with the logic of nature and the logic of the world itself independent of us and our investigation of it. In our current understanding of the brain that seems to be the case as we seem to presume the traditionally isolated model of the brain as purely neuronal. That is only the neuronal surface layer of the brain though. There is a deeper background layer, the neuro-ecological layer where the brain continuously connects us to body and environment.

Culture is not addition, cultural is the default of our brain as it, due to such deeper neuro-ecological background layer, always already situates and embeds us in the respective environmental context. Consider migration. Due to the plasticity of your brain, you will change your habits and language by adopting to your new context. As said, your brain wants to connect and relate and communicate. Communication, on such deeper neuro-ecological layer, is no longer verbal and cognitive; instead, it is pre-verbal and non-verbal as it much more basic on an implicit synchrony with the temporal and spatial pattern of the other.

You encounter a person from a completely different culture and background which you have never seen and even heard before. You may not understand the language. But even worse, you will not understand the gestures, the movements, the facial expression, the emotions – you have no idea what the person means and expresses. An even more extreme case would be if you speak the same language but still cannot understand; that, as we know, happens quite often. How is that possible? Meaning, communication, and competence arise and are constituted by our relationship and alignment to the world as mediated by the brain's deeper neuro-ecological background layer. That is where inter-cultural competence and communication is rooted. Explore and train that layer of your brain, and you will better navigate the world with a better understanding of inter-cultural differences and less prejudices. Open and extend your view to those deeper neuro-ecological layers of your brain's world-brain relation and you will see and understand what Birgit Breninger means by inter-cultural competence in her remarkable book.

Georg Northoff, September 2020, Ottawa/Canada

CHAPTER 1

INTRODUCTION

We don't see things as they are, we see them as we are.
—Anais Nin (1903-1977)

[...] perception is similar to reading poetry:
you are interpreting what it means because it could mean anything.
—Beau Lotto (2017)

All knowing begins with a good question that leads to a passionate quest. This time the critical question is: how can communication contribute to leading a 'good life' and promote harmony and well-being for humans in today's multicultural societies?

It is a grand question that has motivated numerous researchers from various disciplines to embark on a riveting journey down the rabbit hole. This book invites the reader to take a leap of faith and envision a new way of thinking about communication and culture in general and the relevance of perception in particular. The bold endeavour here is to reconceive intercultural communication from a bio-cultural perspective for the purpose of helping to create more caring and just multicultural environments. The ultimate challenge we have to face is the pressing need to understand interdisciplinary complexities regarding living beings and their environments, i.e. behaviours, mindsets, attitudes, decision-making processes and emotions in specific situations and varying contexts. It is pivotal to this venture to investigate communication not solely from a social science stance but at the very interface of other disciplines, as, for example: psychology, biology, humanities, and neuroscience. Human beings have to be understood as always both – living subjectivity and living organism – so 'the cultural' and 'the biological' aspects need to be analysed as constitutive parts of an inseparable whole. The term 'culturalised' is used in this context to emphasise the conception of culture as a phenomenon of highly dynamic and complexly interwoven meaning constructions. Based on interlinked perceptive-affective-cognitive-action systems

wired into the human organism, it is through the culturalisation of an organism that people create, communicate, think, feel, decide, etc. Therefore, culture is approached here as deeply built into a human's neurological wiring, i.e. not so much a 'thing' but as existing in relations and interactions emergent from diverse experiences. This is very much akin to the physicist Herbert Pietschmann's unconventional approach regarding the atom. He claims there is no atom, that the atom only exists in interaction; however, it is most useful to assume this construct (Pietschmann, 1996).

The ambition here is to examine the fundamentally social and deeply culturalised acts of human beings in tandem with the very neurobiological underpinnings that support and enable such interactions and relationships. It is proposed that intercultural communication requires interculturally competent acts and that to act in interculturally competent ways, certain neurobiological systems have to be set up and become functional in individuals. Such systems are often recruited inadvertently and underlie much of our thoughts, feelings and actions. It is, therefore, high time we created richer accounts of social interaction and social change by analysing social construction (society and culture) and 'individual' cognition (mind and brain) as interconnected. In trying to explain various social phenomena, as, for example, violent extremism, it is necessary to explore both underlying neural and behavioural relationships in tandem with emotions, attitudes, values as well as portrayals in the media and their culturalised receptions in specific groups. This 'bigger picture' of the individual and the social requires a profound analysis of the interlinkedness of mental and social mechanisms (see, for example: Thagard, 2019). Examining such entanglements lies at the heart of a more integrative approach in communication research.

But why should we leave the 'safe ports' of our long-established disciplines in an attempt to embrace uncertainty? The answer is a simple but passionate one and insinuated by the well-known quote: "If you only read the books everyone else is reading, you can only think what everyone else is thinking" (Murakami, 2012). Socio-cultural change as necessitated by the endeavour of creating more equal, caring and just multicultural environments requires bold reconceptualisations of established ideas to construct integrated accounts of multilevel phenomena. Very often for researchers, this means they must take up and conclusively implement creative and innovative 'crowd-defying' stance.

The stakes for these researchers are high, as ‘true’ interdisciplinarity usually entails:

- combating disciplinary entrenchment at the risk of not being published and becoming a ‘deviant’ within a discipline
- having to face a scientist’s ultimate nightmare: ‘messy data’ yielded by ‘real-life’ experiments that have been taken out of the artificial lab
- becoming less relevant in communities since many established associations do not encourage thinking beyond the borders of their disciplines but prefer treading well-known ground

So when it comes to research, why explore the shadows by deviating into uncommon perceptions and diverging into creative thoughts when it is so much easier to look for the infamous ‘key’ where the light is best (i.e. established ways of thinking and well-known research methods)? Well, we are facing novel socio-cultural challenges necessitating a change in how we approach science to stay relevant. Let’s take, for example, the digital volatile-uncertain-complex-ambiguous (VUCA) business settings. It is key for leaders not just to survive but to thrive in VUCA environments (cf. Mukherjee, 2020), yet thriving in uncertain times entails not simply being able to adapt to ever-changing environments but being happy to do so. This again presents a fundamental challenge to individual minds. It has been proposed that the major difficulty is that human brains ‘hate’ uncertainty. From an evolutionary angle, not to know was to die, hence, according to Beau Lotto, human brains have evolved to predict and become ‘certain’ (Lotto, 2017, p. 8). So what is needed for global VUCA contexts on an individual level is currently a bit of a bio-cultural paradox: a human being happy to embrace uncertainty as well as unfamiliarity, venturing into complex and unknown territories, inspiring other people to follow whilst creating for the ‘common good’. Facing such ‘paradoxical’ conditions by trying to tackle the real-life situations in which they become relevant will be vital to address in future research.

As far as intercultural communication is concerned, an integrative approach faces at least three main theoretical challenges:

1. the traditional Western conceptions of strictly separated parts of the communication process¹ neglecting a thorough analysis of how the individual 'minds and brains' in action are interrelated with systems and the respective environments
2. the mainly nationalist, i.e. essentialist conceptualisations of culture in which culture has long been conflated with the concept of 'nation'
3. the predominantly 'cognitivist' approach towards culture and its affiliated concepts (e.g.: values, beliefs, communication styles, etc.) in the West

In the first two chapters, I am going to explore these dilemmas in more detail. Suffice to say, reductionist approaches regarding culture (in which e.g. nation equals culture) have often been avidly pursued to yield robust data, usually at the cost of developing more complex theoretical paradigms that tend to generate rather unpredictable, 'messier' data. I feel it is due to this predominantly oversimplified approach in research that the concept of culture has been stripped off its multifaceted layers relevant for addressing real-life issues.

Despite the broad institutionalisation of intercultural communication and intercultural competence classes in many European and US American educational systems as well as in numerous executive programmes, the wind of change is blowing. Many Western societies find themselves once again confronted with an upsurge in nationalism, a renewed trust in macho- and heroic-leadership styles as well as more subtle forms of racism and sexism that seem to be deeply ingrained in often self-replicating systems. Ethical decisions and inclusive concerns have been turned into abstract ideals frequently considered incompatible with 'national' political interests. Nevertheless, to me, they are indispensable for a novel, disruptive leadership style, i.e. a leadership strategy that promotes leading to disrupt complacent structures and defy stultifying conventions to support creating the future people want. Disruptive leadership often involves 'knowing less' but understanding more and acting pro-socially for a good life for all, i.e. prioritising people and communities over profit. It involves overcoming prominent biases in decision making, as for instance, the tendency to

¹ Take, for example, the well-established ten components of communication: source, encoding, message, channel and noise, receiver, decoding, receiver response and feedback in a context (Jandt, 2013, p. 42).

- make decisions without considering the broader context
- fail to reframe problems from alternate perspectives
- maintain the status quo
- favour the familiar over the unfamiliar
- select a 'default' alternative when compelling rationales are hard to come by

But how can we overcome potent biases and approach intercultural communication and competence with new vigour?

It is now almost 30 years since critical thinker Edward Said (1993) introduced the idea of the critic as 'amateur', by which he meant that a critic must reject being locked into narrow professional specialisations in which arcane vocabulary enables exclusive conversation among a handful of specialists. Said's dedicated call for 'amateurism' in intellectual life entails his passionate view of the need for intellectual work to recover its connections with the 'realities' of society. Relevant interdisciplinarity tries to face such real-life challenges and thrives on the researchers' abilities to not only speak to other experts but also to individuals motivated by the cause. The looming risk, however, of not being an expert in more than one field, or rather of not being perceived as an expert, has discouraged many from embarking on truly interdisciplinary endeavours. To reconceive intercultural competence as a powerful concept essential not only for effective communication in multicultural environments but for resilience and wellbeing, we need to venture into the uncharted waters of genuine interdisciplinarity. At the crossroads of communication, culture and biology, I begin to reconceptualise intercultural competence as one of the main adaptive resources of humankind nowadays. Intercultural competence is considered as indispensable for authentic intercultural communication and pivotal for harmonious multicultural societies and global environments. It is fundamental to effective communication and more disruptive leadership styles for navigating the troubled waters of current digital VUCA environments. It is also advocated in this book that intercultural competence has to be regarded as the 'scaffolding' upon which effective communication in multicultural societies is built. Intercultural competence is essential for building bio-cultural resilience in individuals, which again leads to the wellbeing of not only individuals but societies. One cannot generalise about bio-cultural resilience, it has to be approached contextually and situationally to be a relevant concept. Nevertheless it is considered here as

a dynamic, creative response to adversity – an innate (on an individual level) as well as a socio-culturally (on a system level: micro-, meso-, exo-, macro-, chronosystem) emergent human potential to overcome harmful events and deal with negatively perceived situations. I refer to this kind of resilience as ‘bio-cultural’ since living organism and living subjectivity must not be dissected for research purposes since they are mutually joined in the symphony of life.

So what exactly is ‘intercultural competence’ and how can intercultural competence help to create more caring and just multicultural societies? And what role does perception play in all this?

The concept of intercultural competence has a long, somewhat troubled history of being instrumentalised in several ways. Like many other popular ideas, intercultural competence, after its introduction, soon became a buzzword, overused for motivated purposes. In the following chapter, I sketch its manifold conceptualisations, as, for example, ‘intercultural competence’ for obtaining better insights into the psychology of more diverse consumer groups or business advantages. The scientific conflation of the construct with national-culture competence (designing dos and don’ts lists for ‘surviving’ in other cultures) as well as the general trend to decontextualise data have contributed to a very streamlined understanding of intercultural competence. Such motivated approaches have been rather counter-productive and have weakened the important role of intercultural competence for communication and well-being of current and future societies. In this book, I try to reclaim intercultural competence as a powerful concept by casting an integrative bio-sociocultural angle on it. Instead of approaching intercultural competence in terms of skills, knowledge, attitudes, motivations, traits, etc., a new integrative framework is devised based on the level of integration of experiences of cultural otherness in perception. The role of perception has been gravely neglected in the majority of communication research, however, pertinent interdisciplinary ventures start exploring it more thoroughly. For example, as a precursor to stereotyping and discrimination, the tendency to de-individuate members of other racial groups has been amply analysed, yet, the early perceptual nature of such an intergroup bias has been ignored. A recent study explores the idea that this phenomenon is partially rooted in visual and neural processes (Hughes, Babbitt, & Krendl, 2019). This team of scientists concludes that outgroup biases seem to emerge in a culturally dependent way,

based on variability in intergroup contact but not necessarily on the awareness of stereotypes. I am going to venture further into the realm of the visual and propose that intercultural competence has to be supported by a fully integrated intercultural perceptual architecture suffused with genuinely positive affect systems towards cultural unfamiliarity. To be more precise, intercultural competence here refers to the successful integration of experiences of cultural otherness² into the dynamically interlinked perceptive-affective-cognitive-action systems of individuals. This means, that to develop the relevant neurobiological underpinnings of a culturally adaptive and resilient person, intercultural competence is outlined to require a functional architecture of highly interlinked perceptive-affective-cognitive-action systems (PACA-system) in regard to relevant experiences with cultural otherness. To differentiate this intercultural competence construct from other conceptions, this book refers to it as Intercultural Competence® framework (read: 'Intercultural Competence revisited' or ICC®). Intercultural Competence® is delineated as an enactive framework claiming that if a fully functional PACA-system (i.e. highly interlinked perceptive-affective-cognitive-action systems) regarding cultural otherness (i.e. people as well as objects/events) is in place, the actions taken by the individual will be informed by genuine respect and appreciation of cultural otherness (familiar and unfamiliar alike). Since this kind of expertise emerges from relevant competencies and co-activating mindsets (as, for example, creativity, moral and gender competence), it is argued here, that the integration of cultural otherness provides the central axis, i.e. the required scaffolding, for effective communication and bio-cultural resilience.

In the attempt to reconceive intercultural competence and intercultural communication from a genuinely interdisciplinary and enactive angle, the Intercultural Competence® framework draws on different knowledge traditions and constructs. Therefore, a comprehensive multidisciplinary introduction providing an overview of the relevant topics and disciplines in a bold advance to conceive the inevitable complexity of culture and human communication prefaces each chapter in this book and builds on the previous chapter to develop the essential parts of a dynamic, intersectional bio-sociocultural frame-

² Cultural otherness refers to both cultural others (i.e. people) and cultural differences (i.e. acts, events, things, etc.). This distinction is necessary because the social brain is wired for 'WE' and processes people in a different way.

work. Hence this general introduction provides only brief snapshots of each chapter. Chapter 2 begins to position the Intercultural Competence® framework in the canon of established theoretical approaches. It also outlines the main ideas and reconceptions of the enactive ICC® framework along the major differences of conceiving of intercultural competence as

1. based on the neuro-biological integration of cultural otherness (i.e. people and acts) in individuals
2. enactive, bound to actions in a genuine pursuit of creating more caring, just and equal societies
3. conceived as intersectional – i.e. it emerges from the convergence of other dynamic processes, such as moral and gender expertise as well as creativity.

Next outlined are the three basic levels of perceptual change in ICC® as well as the two transitory stages (T1 and T2) between them:

1. ethnocentric – one's own culturalised view is perceived to be the viable and normal one
2. ethnorelative – one does accept the existence of other valid perspectives but lacks genuine appreciation for them
3. intercultural – one is able to acknowledge and truly value cultural difference based on a successful integration of cultural otherness; novel ways of seeing and meaning making are authentically employed.

It is assumed if a fully functional PACA system (i.e. highly interconnected perceptive-affective-cognitive-action systems) regarding cultural otherness (i.e. people and acts) is in place then pro-sociality and respect regarding cultural otherness (familiar and unfamiliar ones alike) will inform an individual's actions. This is why effective and appropriate intercultural communication has to be suffused with Intercultural Competence.

In elaborating on the emerging concept of Intercultural Competence, perception takes a central role. Perception is always already motivated by 'past experiences', such as habitualised actions and attitudes, engrained judgements and cultural norms which orientate the gaze and direct attention towards a culturalised, selective way of pro-

cessing. It is claimed here that the accumulation of cultural expertise³ regarding cultural others (i.e. people) and cultural differences (i.e. acts, events, things) goes hand in hand with the development of 'different' or, rather, 'new' perceptions. Hence it is suggested that the perceptual experience is not only altered in the course of acquisition of cultural expertise and tuned to cultural features and specific properties (i.e., to principally see the 'relevant' aspects of a scene/event/problem/etc.) but that perception is profoundly changed (i.e. rewired). The newly established perceptual architecture as well as the plasticity of perception play a central role in conceiving Intercultural Competence. To understand what is happening on a neurobiological level, the full perceptual process is outlined in chapter 2.

After laying down the theoretical cornerstones of the Intercultural Competence® framework and embedding it in an intellectual canon, chapter 3 is dedicated to the various ways in which the brain is sculpted by relevant cultural experiences. I briefly introduce the social brain, its plasticity as well as pertinent concepts from cultural neuroscience and advance the idea of a spectrum of processing 'Cultural Others' underlying the Intercultural Competence® framework. A model of processing cultural otherness is developed, claiming that various types of experiences regarding cultural others (i.e. people) and differences (i.e. acts, events, etc.) have to be successfully integrated into the individual's PACA-system along several qualitative dimensions and situations on a continuum between two major types of otherness (familiar and unfamiliar). This integration process is considered necessary to develop shallow cultural experiences into more sophisticated, more complex experiences. In the ICC® framework, cultural expertise is largely based on familiarity, entailing the frequency, valence and intensity of cultural experiences in terms of exposure, experience, interaction and interaffection with a stimulus in a specific situative context. To become interculturally competent (i.e. to acquire cultural expertise) in ICC®, various significant relationships need to be successfully resolved via the integration of cultural otherness into the neurological wiring along a continuum of familiarity between the self, the 'familiar other' (close and distant) and the 'unfamiliar Other' (entirely unknown). In particular, Georg Northoff's

³ In ICC® cultural expertise is used synonymously with Intercultural Competence.

(2016, p. 33) idea of an encoding of a sociocultural statistics into the brain's neural activity has been pivotal here.

Regarding perception, it is important to remember that perceivers often simply do not realise they are 'seeing' a world that is to a large extent unique to them, i.e. shaped by their prior experiences and not an objective reality that everyone else shares. This is why perception is considered to be culturalised. Becoming interculturally competent implies not only being able to select appropriate, relevant features but entails a unique visual transformation affecting the entire perceptual system. Perception is understood not as an isolated operation in our brain but as part of ongoing, complexly interacting processes of the perception-affect-cognition-action systems (i.e.: the PACA-system).

Chapter 4 analyses how the brain, being a very sophisticated interpreter, creates a relevant perception of a world around cultural otherness, rather than simply relaying 'a reality' in neutral ways. In the Intercultural Competence® framework, perception takes a central role and is considered the foundation of human experience. The neuroscientist Beau Lotto even states that 'everything begins with perception' and foreshadows that the next big innovation is not a new technology but a new way of seeing (Lotto, 2017, p. 4). The Intercultural Competence® framework argues that cultural expertise involves becoming more sensitive, efficient and strategic in perceiving, a development that results in a profound change in perceptual experiences. This might also emerge from using perceptual processes for novel purposes, essentially co-opting through notations and inscriptions the typical role of the perceptual process. So learned perceptual and perceptual-motor routines play a significant role in the acquisition of cultural expertise. Such routines may even replace quintessentially non-perceptual content and generalise beyond the specialised representations and situations.

Chapter 4 introduces the processing of visual information as well as visual perceptual learning alongside relevant approaches to the perception-action cycle to explicate this idea further. For this purpose, the enactive paradigm is outlined here in more detail. Very much in line with enactive approaches, the Intercultural Competence® framework considers cognition in terms of meaning production rather than information processing. When viewed from an enactive stance, the infamous computer metaphor, as an example for a heteronomous

system long used to explain cognition, is replaced by the idea of cognitive systems as autonomous systems. To share Cor Baerveldt and Theo Verheggen's (Baerveldt & Verheggen, 1999, p. 194) well-known difference between a computer and human cognition: 'A computer has a design instead of a history'. Enactivism offers a highly suitable frame for reconceptualising intercultural competence since it proposes an alternative to dualism, emphasising the interactions between the body, the mind and the environment. Chapter 4 explicates the main tenets of enactivism and a complex tapestry of several interrelated and mutually supporting ideas from various fields of inquiry to expound the Intercultural Competence® framework along the lines of central enactive ideas.

ICC® embraces an enactive view, taking into account lived cultural experiences and reflexivity by trying to provide an all-inclusive framework to articulate the numerous domains and levels of organisation claimed to be involved and interacting in the PACA-system (i.e. interlinked perception, affect, cognition and action systems). Cognition is approached in an enactive and dynamic way, which means the (living) organism is characterised as 'complex, self-organising, context dependent, plastic and vastly variable, yet patterned and recurrent'. Explaining cognition is really explaining how brain, body and world necessitate one another to achieve adaptive behaviour, rather than explaining how certain structures represent and control specific behaviours. Very much in vein with enactivism, it is argued that appropriate actions taken on a regular base are then essential throughout life to stabilise the functional architecture of Intercultural Competence in the respective circuits.

Chapter 5 explores the cognitive-emotional brain and outlines how the different roles affect systems and emotions play in perception and action. It discusses the intricacies of perception and affect further in two central fields: how we feel others (in our case cultural others) and what roles do emotion and affect play not only in individuals but also in group processes and in the formation of social structures? For this purpose, the chapter analyses relationship between intersubjectivity and affect (interaction as well as inter-affection). From an enactive stance, our sense of reality is very much our capacity to coordinate our experience and actions with other subjects, so bridging the gap between the social and the cognitive sciences is believed to be pivotal to understand social interactions in contexts. However, context alone

is not enough: in line with the Interactive Brain Hypothesis (IBH), it is suggested that both individual and interactive mechanisms have to be treated as relevant from the beginning (cf. De Jaegher, Di Paolo, & Adolphs, 2016, pp. 2-3). The IBH suggests extra-neural relational patterns play a constitutive role in direct interaction with others, in instances involving the presence of others and instances which predispose individuals to engage interactively (even if they do not). That is why the individual has to be analysed in relation to other individuals as well as to social levels. The 'micro-macro link' or the 'self-society dynamic' (Howard, 1991) is explored with the help of the affective systems and linked to the successful integration of experiences of cultural otherness into the PACA-system. In doing so, the interplay of social norms and emotions is explored further due to the conceptual relevance of norms in the Intercultural Competence® framework. Next, the chapter outlines the infamous Default Mode Network (DMN) of the brain in regard to culture and learning and is connected to morality and creativity. The dynamic cooperation between brain networks that needs to be established for successful integration of experiences of cultural otherness into the PACA-system is introduced alongside the claim of a necessary co-emergence of various intersecting 'competences'. Since Intercultural Competence is a multi-componential process for which numerous parts have to collaborate to support the function, certain other scaffolds need to be in place, which is why an intersectional development of competencies is considered *sine qua non*. In short, it is argued that for the development of Intercultural Competence the co-emergence of various converging competences, such as moral, gender and creative expertise is vital.

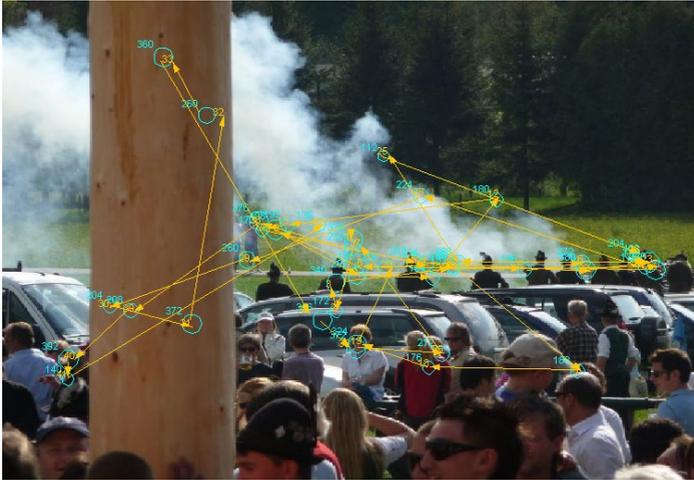
Chapter 6 introduces this co-development by integrating the activation of particular moral mindsets regarding cultural others. Building on the ICC® framework, an intersectional version with a focus on moral development in multicultural environments is designed: the Interactive Neuro-Cultural Theory of Moral Development towards the 'Cultural Other' (MoCO). Here, intercultural and moral competences are intersectionally approached by complementing the Intercultural Competence® framework with selected aspects of the Triune Ethics Meta-Theory (TEM) (2014; 2016). The MoCO is an example of an interlinked theoretical avenue outlining such complex integration processes of cultural others and the habitual engagement of various moral mindsets in individuals. This means, for example, that ethnorelative individuals do not activate self-protective and safety moral mindsets

as often as ethnocentric individuals when it comes to cultural others. In the Moral Development towards the Cultural Other (MoCO) theory, the successful integration of moral expertise alongside Intercultural Competence regarding cultural others is fundamental for ethically informed decision making as well as for taking ethical actions in multicultural environments, so an essential co-dependence between cultural and moral expertise is delineated for the development of Intercultural Competence.

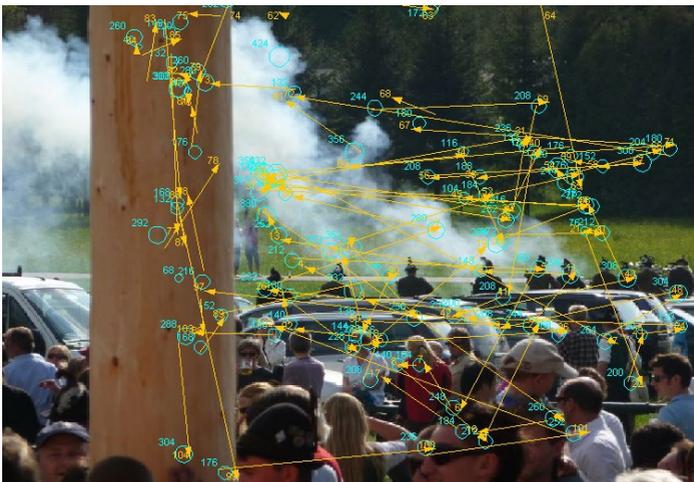
An inherent paradox, however, presents itself when trying to empirically back up the Intercultural Competence® framework and its inter-related theoretical strands (e.g. the MoCO): how to assess an enactive framework that analyses dynamically emerging and co-emerging processes and takes into account lived experience in a state of a system that changes over time? Instead of designing another paper-and-pencil test, traditionally used to assess intercultural competence, a novel culturalised, perceptuo-cognitive experimental pilot was created. This qualitative pilot, a small-scale study, also became a useful instrument to pre-test eyetracking for future assessments of Intercultural Competence.

Chapter 6 introduces initial data from this combined eyetracking-questionnaire experimental pilot for which subject responses are analysed alongside their gaze patterns in intersectional ways. The visual data yielded by the converging sets of the perceptuo-cognitive experimental pilot (encompassing moral, gender, ethical creativity data sets) are then introduced in the respective chapters (chapter 6, 7 and 8) alongside their intersectional theoretical avenues in initial support of the Intercultural Competence® framework. Since cultural expertise involves tailoring perceptual processes, the perceptual architecture (in the entire PACA-system) of ethnocentric, ethnorelative and intercultural individuals should differ. Accordingly, the gaze protocols obtained in the eyetracking should differ. Since this is uncharted empirical territory, the pivotal question was: how would they differ? Take, for example, the two gaze protocols below from a distractor stimulus termed 'Maypole/ *Maibaum*' (stimulus no. 30 of the pilot experiment). Individuals had to answer the question: 'Why are the Austrians firing their guns in this photograph?' The first gaze protocol depicts a dominant cultural reading pattern of a culturally informed individual providing the expected answer, whereas the second gaze

protocol displays the tracking of a differently-culturalised individual unable to make sense of this visual stimulus.



Pic. 1: Austrian subject



Pic.2: Nigerian subject (length of stay in Austria: three years)

The gaze protocols and the answers by the two subjects differed and after a long period of pre-testing, certain more representative gaze patterns of differently culturalised individuals became apparent. For the perceptuo-cognitive experimental pilot, critical incidences as well as relevant culturalised case works were translated into visual items. Such visualised real-life scenarios made it possible to document instances where perceptions critically interact with culturalised contexts and situations and helped to elicit culturally relevant decision-making processes, for example, in promoting, shifting moral mindsets in individuals. For the purpose of identifying more implicit biases in perception that lead to biased processing in the cognitive-affective systems and hence to different action outcomes, different researchers correlated the two data sets (gaze and response patterns). After substantial pre-testing (Breninger, 2018; Breninger & Kaltenbacher, 2008, 2012, 2014), relevant clusters for culturalised gaze types and response styles were established. Suffice to say, the resultant gaze protocols enabled us to obtain more comprehensive data about the different levels of integration of cultural otherness, also helping, for example, to explain dissociation phenomena of why individuals say one thing but do another.

Chapter 7 intersectionally analyses Intercultural Competence with gender sensitivity, based on the idea that for effective communication and respectful acts in multicultural societies, gender sensitivity has to be suffused with cultural expertise. Expressions of sexism have been affected by the changing norms and values of various public and private socio-cultural contexts over time. More recently, however, one of the key questions posed in the private and public sectors has been: is this decision, behaviour, action etc. sexist or not? Of particular interest is this query: who perceives what as sexist and why is that so? Since perceptions of various types of sexism as well as gender sensitivity are culturalised, it is pivotal to approach the topic from an intersectional stance. This necessitates matrix thinking as opposed to a single-axis approach in the empirical paradigm as well. To analyse various types of sexism as well as gender sensitivity in cultural otherness, i.e. in tandem with the three proposed integration levels of cultural otherness (ethnocentric, ethnorelative, intercultural), another theoretical strand for ICC® had to be developed. Informed by ICC®, the Integrative Sexism Framework (ISF) expands on culturalised dissonance around sexism. For an analysis of the various types of sexism at work, it is crucial to bear in mind that gender stereotypes do not nec-

essarily need to be personally endorsed at an explicit level of awareness to be influential (cf. Bargh, Chen, & Burrows, 1996; Wheeler & Petty, 2001). The overlapping gender competence set of the perceptuo-cognitive experiment yielded informative, preliminary data in support of the Integrative Sexism Framework (ISF), and the combined perceptuo-cognitive data analysis offered promising avenues to make social desirability visible.

Penultimate chapter 8 discusses the powerful role, real-life, everyday creativity plays in Intercultural Competence. The Intercultural Competence® framework regards building and activating the more subtle capacities for original and creative perception in cultural otherness as one of the key abilities in setting up an interculturally sensitive perceptual architecture. It is claimed here that individuals tend to be more 'mechanical in perception' (cf. Bohm, 2004; first published 1996) regarding cultural otherness at certain levels of integration (i.e. at ethnocentric and ethnorelative levels). However, to accomplish creativity in decision-making processes or problem-solving approaches for multicultural environments, creative perception is called for. Yet creativity in a cultural context cannot simply be approached from a purist stance, i.e. 'creativity for creativity's sake'. In the context of culture, it is suggested that one has to additionally focus on the relationship between creativity and ethics when analysing creativity. For this purpose, the Culture and Creativity Model (CuCro) is intersectionally devised and 'ethical creativity' plays a significant role in accumulating relevant cultural expertise in the Intercultural Competence® framework. Ethical creativity is conceived as a dynamic process informed by the co-activation of benevolent, moral mindsets and creative mindsets. Whereas the moral mindsets have to be informed by the level of integration of experiences of cultural otherness, the creative mindsets have to be informed by 'real perception' (cf. Bohm, 2004; first published 1996). This occurs when the individual is able to break out of habituated patterns. Hence the Intercultural Competence® framework considers necessary a certain level of successful integration of cultural otherness to enact 'ethical creativity' in multicultural realms.

In trying to weave together the complex tapestry of Intercultural Competence, one has to reclaim several ideas and concepts in an interdisciplinary manner. Casting an exclusively disciplinary angle on a complex matter essentially means a reduction and dissection of cer-

tain parts that work differently when orchestrated. As such, the enactive and embodied approach of the Intercultural Competence® framework propagates an understanding of cognition as dynamicist: unfolding as the continuous coevolution of perceiving, feeling, thinking, acting. Throughout this book it is advocated that researchers must not be lured into false promises of simplification that have been pitched by familiar ideas. Gayatri Chakravorty Spivak so accurately once addressed this complexity of emergent processes in literary criticism: "We know plain prose cheats" (Danius, Jonsson, & Spivak, 1993, p. 33). She urges the style of theoretical composition be complex and flexible enough to reveal the complex, contradictory and shifting status of socio-cultural and geo-political relations. At the intersections of culture and communication, neither brains, individuals, groups and social structures nor perception, affect, cognition and action can be isolated, but have to be analysed in tandem since they are connected in a world and perceived as well as enacted by people to make sense to them.

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