Introduction

Since the 2008 global financial crisis and US military interventions in the Middle East, China’s leaders consider themselves in an unparalleled strategic ‘window of opportunity’ under ‘new conditions’ of Western decline that could enable transformation of world order for centuries.¹ China’s Leading public intellectuals draw attention to Western failures combined with China’s double-digit growth figures to argue the world has entered a ‘post-American century’.² These politically influential thinkers believe China will be a ‘new type of superpower’ that rules by consent and attraction instead of ‘Western’ coercion and assimilation (Hu & Hu, 2012).* This optimism amongst Chinese elites and scholars has driven public debate in popular books and online commentary, culminating in Xi Jinping’s signature slogan of the ‘China Dream’ of the Great Revival (weida fuxing 伟大复兴) to become a ‘strong and prosperous nation’ (fuqiang daguo 富强大国) again. However, this optimism conceals deep pessimism at the heart of these debates that identity and insecurity on China’s ethnic peripheries could derail the Great Revival. While the 2008 Beijing Olympics slogan, ‘one-world-one-dream’, circulated across official media, riots and inter-ethnic violence exploded in Lhasa, Tibet. The 60th anniversary of the founding of the People’s Republic of China (PRC) was subsequently overshadowed by ethnically targeted violence between Turkic-speaking Muslim Uyghurs and the Han ethnic majority. The events of July 2009 claimed at least 197 lives in Ürümqi, the capital city of the Xinjiang Uyghur Autonomous Region (XUAR) (Xinhua, 2009a). The violence sparked broad debates amongst China’s ethnic policy thinkers about the relationship between identity and national security.³

¹ Note: Chinese naming practices list surnames first and this book follows this practice in text and in the references section, e.g. Ma Rong is listed as Ma, Rong (2007) in the references.
² For example, see: Xi MFA (2014); NDRC (2013; 2017).
³ For example, see: Hu & Hu (2012); Wang, Yiwei (2014); Yan, Xuetong (2013); Zhang, Weiwei (2012).

A self-described ‘2nd generation’ of minzu policy scholars challenged the ‘1st generation’ historical materialist focus on economic development, arguing for a policy shift towards ‘fusion’
2 Introduction

China must re-adjust its ethnic minority policies ‘or there will be further difficulties’ (Smith Finley, 2011, p.78). This book analyses the social and political dynamics in Xinjiang that led to the turning point of 2009, culminating in a rethink of identity and security in China and ethnic policy shifts towards ‘fusion’ (jiaorong 交融).

On July 5, 2009, Uyghur rioters violently targeted ordinary Han Chinese residents in Ürümchi. On July 7, hundreds of Han residents organised into vigilante groups targeting random Uyghurs. Uyghurs, Han, and the security services were all perpetrators and victims (Roberts, 2012, pp.15–16). The 2009 violence was disarming for officials and for analysts of China. Unlike outbreaks of political violence in Xinjiang during the 1990s, it was committed by ordinary, unarmed people against other ordinary, unarmed people. Ethnic relations have since become understood as a significant challenge to the party-state’s capacity to provide political stability and economic development. Since 2009, a shared national identity built on ‘ethnic unity’ (minzu tuanjie 民族团结) has been officially described in existential terms as a prerequisite to China’s rise and a ‘zero-sum political struggle of life or death’ (XEP, 2009, p.15). China’s leading thinkers and policymakers conjure nightmarish, mirror-images to dreams of prosperity and power that foretell national collapse if ethnic minorities and Han do not identify as the same timeless nation. To secure dreams of unity and revival, the Chinese Communist Party (CCP) has operated mass extra-legal internment camps as ‘Education and Transformation Centres’ (jiaoyu peixun zhongxin 教育培训中心) in Xinjiang since 2017. Internment camps are part of increasing controls over the Uyghur population since the ‘de-extremification’ (qujiduanhua 去极端化) campaign’s intensification in 2015, under new regional party-chief Chen Quanguo (Roberts, 2018, pp.246–250). Scholarly estimates from official sources suggest approximately 1 million people, 10 per cent of the adult Uyghur population, have been interned, though figures are constantly rising (Zenz, 2018, p.1). These exceptional policies towards ‘fusion’ are logical conclusions of the ethnocentric insecurity cycles analysed in this book. The party-state has long targeted Uyghur identities as causes of violence and obstacles to China’s revival. The party-state frames China’s survival hinging on identification with its narrative of Chinese identity (Zhonghua Minzu 中华民族) and minority identities as into a race-state (guozu 国族). For an example of the public debate, see: Zhongguo Minzu Zongjiawang (2012).

4 For example, see Bovingdon (2004a; 2010).

5 US Defense Department estimates go as far as 3 million, nearly a third of the Uyghur population in China, referring to them as ‘concentration camps’. See Stewart (2019).

6 Zhonghua Minzu can be simply translated as ‘China’. However, as Chapter 1 briefly discusses, the term’s history of racial connotations predates the adoption of nationalism and China (zhongguo 中国) as the name for the PRC. The term has historically been used in different
security problems to be solved. This ethnocentric blindspot overlooks the role of the state and the majority in ethnicised violence, enabling inconsistent policy that exacerbates insecurity in Xinjiang. This book then interrogates the triadic relations between majority, minorities, and the state in the production of identities and insecurities in Xinjiang. It examines the relationship between identity and security in contemporary China by analysing Han and Uyghur responses to the party-state’s grand identity narratives and its securitised approach to everyday ethnic relations in Xinjiang. How do official nation-building narratives and unofficial self-identifications of Uyghurs and Han in Xinjiang shape each other? To what extent does official promotion of identity in Xinjiang as a national security matter make the region secure? The book argues that China’s nation-building project in Xinjiang exacerbates insecurity and hardens ethnic boundaries.

The book speaks to traditions of scholarly works at the intersection between detailed micro-empirics of Chinese studies, and broader conceptual approaches of International Relations (IR). It analyses how the party-state’s nation-building project to build a shared multi-ethnic, national identity in Xinjiang is practiced as a security matter, shaping Han and Uyghur identities and insecurities on the ground. The book assesses the outcomes of nation-building through its popular reception amongst Han and Uyghurs, whose identities are articulated through narratives of China as a ‘unified and pluralistic’ (duoyuan yiti 多元一体) nation constituted by 56 minzu (民族)7 with Han as the ‘nucleus’ or ‘centripetal force’ (ningjuli 凝聚力).8 Since the mid-1950s, the consensus in China’s political and intellectual establishment has been that China is a multi-ethnic state (duo minzu guojia 多民族国家) and ‘one-nation, one-state’ is a Western concept unsuited to its ‘national conditions’ (Pan, 2008a). However, in the era of China’s rise, this exceptionalism is being reconfigured to frame China’s ethnic diversity as built on Chinese civilizational continuity ‘since ancient times’ (State Council, 2009a). There are 56 officially recognised minzu groups in China, re-categorised from ‘barbarians’ to Chinese ‘ethnic minorities’ (shaoshu minzu 少数民族) after 1949. These groups span diverse geographical and linguistic regions, ranging from East Asian majority Han and minority Koreans (Chaoxianzu 朝鲜族), to

ways, but today tends to imply racial origins. It is used over the more civic-minded Zhongguo and is supplanting references to 56 different ethnic groups in conceptualising the Chinese nation (see next footnote and Conclusion to the book).

7 Official translation of minzu changed from ‘nationality’ to ‘ethnicity’ during the 1990s to avoid associations with self-determination (Barabantseva, 2009). Following Harrell (1990), minzu is left untranslated because it does not entail self-identification as is often assumed in Euro-American anthropology.

8 These are official concepts primarily drawn from the seminal work of Fei Xiaotong (1980; 1988).
South East Asian Thai (Daizu傣族), to South Asian Tibetans (Zangzu藏族), to Inner Asian Mongolians (Mengguzu蒙古族), and Central Asian Uyghurs (Weiwuerzu维吾尔族). The CCP categorises diverse ethnic groups and contains their identities within Chinese civilisational history and the sovereign boundaries of the modern territorialised state. Since Zhou Enlai declared ‘Five Principles of Peaceful Co-existence’ after the 1954 Pancsheel peace treaty negotiations with India, territorial conceptualisations of statehood (sovereignty and non-interference) have been the core of China’s foreign policy. However, the era of China’s rise has seen intellectuals and officials re-conceptualise China through narratives of an exceptional, non-Western, and unbroken 5,000-year-old civilisation. Zhonghua Minzu, therefore, is built through competing logics of imperial civilisation and the modern nation-state, producing policy tensions between equal inclusion of minorities in the nation and exclusion as non-Chinese barbarians.

Many scholars, dazzled by 5,000 years of civilisation and complex relations between socialism, capitalism, and nationalism in contemporary China, assert that China is exceptional and beyond comprehension of social sciences. Lucian Pye, the American political scientist, built on Sinological approaches standardised by John King Fairbank (1968), famously conceptualising China as ‘a civilisation pretending to be a state’ and a ‘miracle’ of ‘astonishing unity’ (Pye, 1990, p.58). The late, great expert on nationalism, Eric Hobsbawm (1990), considered China a unique ‘historic nation’, historically avoiding European problems of secession due to ethnic homogeneity. More recent critical approaches, which analyse diverse political narratives in contemporary China, such as Callahan’s (2013) China Dreams, show how exceptionalist narratives are just one popular interpretation of China that drives scholars and officials to construct policy by distinguishing China’s unique path from Western civilisation. The re-emergence of cultural nationalism tells a story of unbroken, civilisational continuity through ‘5,000 years’ of Zhonghua Minzu, rather than the modernising, transformative impulses of socialism. Former diplomat Zhang Weiwei echoed the orientalist undertones of Western Sinology infusing this trend when he wrote that ‘China is a unique civilisation-state’ with an unbroken, unified history (Zhang, 2011; 2012). Former President Hu Jintao repeated the socialist narratives of Mao Zedong, Deng Xiaoping, and Jiang Zemin, that the ‘new China’ was established after a century of revolutionary struggle against Western imperialism and reactionary domestic separatists. However, Hu and leading thinkers also reassert that China is held together by its unique civilisational identity of ‘teaching without discrimination’ (jiaohua), allowing non-Han barbarians to become Chinese through

---

9 On the rise of cultural nationalism and the harmony concept, see Callahan (2012; 2013) and Nordin (2012).
acculturation, as opposed to the ethnic exclusion of Western nation-states (Ma, 2007, p.7). Narratives of China as a modernising state that transforms tradition and China as unbroken civilisation circulate in the same official and intellectual conceptualisations of China. China is thus produced somewhere between the ‘extremes of modern/traditional, barbarian/civilised, margin/core, and inside/outside’ (Barabantseva, 2011, p.276). China paradoxically includes ethnic minorities as timelessly Chinese and excludes them as less Chinese than Han, constituting ambivalent boundaries that externally demarcate and internally structure Zhonghua Minzu. Minorities must identify through logically incompatible visions of identity: socialist transformation of tradition and continuity as marginalised barbarians in Chinese civilisation. China’s inclusion of minorities is as ambivalent as the identity within which they are being included.

Most studies of nationalism in contemporary China focus on construction of Japan and the West as threats in the post-1989 ‘patriotic education’ campaign (aiguozhuyi jiaoyu 爱国主义教育). The CCP positions itself as guarantor of security against existential threats of Japanese and Western imperialist designs to split China or contain its economic development, because ‘without the CCP, there would be no new China’. However, the position of ‘domestic strangers’, what Sun Yat-Sen called ‘internal foreigners’, is crucial to understanding the origins and boundary production practices in contemporary nationalisms we label Chinese (Callahan, 2010, p.128). The CCP has always described itself as the guarantor of Chinese identity and security against intertwined existential threats of Western imperialism and barbarian separatists within. The external boundaries of China and internal boundaries between different ethnic groups are inseparable in constituting what it means to be a non-Western Chinese civilisation. This book focuses on the 2009 violence in Xinjiang as a turning point in official approaches to identity and security, marked by the party-state’s announcement that domestic ‘ethnic unity’ is necessary to secure China at domestic and global levels. The book will show how competing nationalisms in Xinjiang from above and below (official, Han, and Uyghur) challenge and complement mainstream understandings of Chinese nationalisms because they redirect external boundaries inwards to identify Chinese friends and non-Chinese enemies within. Nationalism in China is state-driven but also a grammar of resistance against the party for failing to protect the nation against the West and Japan (Gries, 2004, p.181). However, in Xinjiang, dynamics of legitimation and resistance are turned inwards. People speak to the state to secure their identity against internal others at a neighbourhood level.

10 For example, see: Callahan (2006); Gries (2004); Hughes (2006); Zhao (1998; 2004).
Introduction

The Chinese state has faced historical recurrences of Uyghur resistance, following incorporation of the ‘Western Regions’ (xiyu 西域) into the Manchu Empire in 1759 and after the region was renamed ‘new frontier’ (Xinjiang 新疆) in 1884. Naming the region as a frontier perpetuates Xinjiang’s position as a newly discovered periphery ruled by and defined in contrast to the old centre of China. Xinjiang has been integrated into China through inscriptions of difference and inferiority that maintain its frontier status and constant cultural conversion to make ‘domestic strangers’ identify themselves and their history as Chinese. Popular exceptionalism in Sinology and Chinese scholarship, which frames contemporary China as an unbroken civilisation, invisibilises how different peoples in Xinjiang have been incorporated into China through imperial state expansion and only later through nationalist discourses. Critical Asian Studies scholars who look to China’s cultural frontiers and analyse the diverse ethnic groupings concealed by national history have deeply challenged the way Sinological knowledge can support this political project. Historians and social scientists writing about Xinjiang focus on ‘multiple centres’ and ‘in-between-ness’ of the region between China, Central Asia, and Russia. The languages and religions of many groups within the PRC’s contemporary borders, including Uyghurs, are the result of thousands of years of trans-border, inter-civilisational exchange, blurring the lines between Chinese, Islamic, Turkic, Mongolian, Tibetan, and Indian civilisations. These complexities are obscured by China’s rise and the party-state’s growing power to represent multiple peoples within its territory as historically Chinese. As James Leibold tells us, ‘it would seem that with each passing day, China is becoming more “Chinese”, and the mythomoteur of the frontier is fading into the red sun of the centre’ (Leibold, 2007, p.183). China’s most politically influential scholars have now pushed ethnic policy towards promotion of ‘fusion’ to become a nation-state (minzu guojia 民族国家) or race-state (guozu 国族), to compete with other states and resist attempts of ‘western enemies’ to prevent China’s rise (Hu & Hu, 2012; Zhu, 2012). Conceptualising China through ‘fusion’ of many peoples into a singular identity represented by the state is a shift towards what Chinese scholars and official discourse have traditionally termed a European ‘one-nation, one-state’ model. This transformation is conceived as the means to maintain Chinese civilisation in a Western global order, but its identity is deeply shaped by that order. Furthermore, ‘fusion’ cannot succeed without mass state-violence because the

---

11 For example, see: Clarke (2007a; 2007b; 2010).
13 For example, see: Brophy (2016); Millward (2007); Perdue (2005); Starr (2004).
more the CCP demands assimilation in Xinjiang, the more resistance it engenders.

Looking to the northwest frontier (Xinjiang) to understand the centre of China addresses pressing gaps in mainstream Chinese Studies literature that overlooks how official policy and national identity narratives in Xinjiang sometimes complement but often contradict mainstream understandings of China. Contemporary classics on the formation of modern China in the early twentieth century pay limited attention to the region and some avoid mentioning it altogether.\(^{14}\) During this period, loyalties to Pan-Turkism, Islam, and the Soviet Union were fiercely debated in Xinjiang, contesting different conceptualisations of nationhood and provide fertile analytical ground for scholars of Xinjiang’s history and identities.\(^{15}\) By overlooking Xinjiang, Chinese Studies can neglect how the conceptualisation and governance of peripheralised regions constitute the centre’s boundaries. Confucian historians, including Tu Wei-ming, explain that conceptualising and governing the periphery is central to defining Chinese-ness, that is always a ‘geopolitical concept’ and a cultural ‘living reality’ (Tu, 2005, p.145). Chinese Studies’ Sinocentric blind-spot inadvertently subsumes Xinjiang into its conceptualisations of China or leaves it untouched as an exotic anomaly beyond analytical comprehension.

The omission of Xinjiang from detailed analysis in Chinese Studies reflects and reinforces the official ambivalent position of the region where its territorial inalienability and incomprehensible cultural otherness are taken for granted. Xinjiang covers one sixth of the PRC’s territory. Linking analysis of the region to national-level identity and security discourses enables more complex and intriguing understandings of contemporary Chinese politics and society. For example, repressive political controls and ongoing state dominance of Xinjiang’s economy challenge standard understandings of the ‘opening and reform era’ (1978 onwards)\(^{16}\) as a distinct break from communist ‘authoritarianism’ towards political pluralism and economic liberalisation.

More than 30 years ago, Vivienne Shue (1988) argued that economic reform and increased political controls could co-exist. However, unproblematised liberal assumptions that consider markets and authoritarianism mutually exclusive persist despite the empirical evidence. A partial story of China has been constructed by overlooking regions and issues that show evidence of decreasing openness and pluralism, while failing to address links between economic development and state-violence. Scholars of contemporary Xinjiang note too

\(^{14}\) For example, see: Duara (1988); Fairbank & Goldman (2006); Harrison (2000); Mitter (2004); Spence (1990).

\(^{15}\) For example, see: Schluesel (2009) on Turkish flags in Uyghur classrooms, Millward (2007) on the Jaddids, and Brophy (2016) on the role of the Soviet Union.

\(^{16}\) For example, see: Becquelin (2000; 2004a); Bovingdon (2010).
many similarities between classic European colonial forms and metropolitan
dominance in Xinjiang to dismiss claims that its governance represents a ‘colonial endeavour’ (Cliff, 2016, pp.7-9). Narratives of ‘backward’ and
dangerous Uyghur identity justify Xinjiang’s state of exception, enabling
contention of vernacular alternatives to CCP historical narratives with armed
resistance to China’s rise (Bovingdon, 2010, pp.7-9; Cliff, 2016, p.216). The
XUAR government’s work, overseen by the State Council, runs counter to
assumptions of increasing local autonomy nationwide, which draw from
studies excluding the region from their conclusions. National-level discourse
drives Xinjiang policy, even if the state is not entirely in command. Local
conditions mediate concrete effects of policy on the ground. Analysing identity
and insecurity in Xinjiang show how the centre articulates and securitises
China as 56 minzu united by Hua civilisation. However, Han and Uyghur
identities in Xinjiang constrain the state’s ability to achieve its intertwined
nation-building goals of a shared Zhonghua Minzu identity and global power.

This book contributes to understanding how the broader context of China’s
identity and security shaped the 2009 violence in Xinjiang and the subsequent
security response. It asks, Who is the China narrated by the party-state’s
nation-building project in Xinjiang? How do its identity narratives and related
policy practices shape identities and insecurities on the ground? The book
argues that the party-state’s framing of Uyghur Turkic and Islamic identities as
ever-present security threats demarcates ethnic boundaries and constructs
an ethno-hierarchy, producing different insecurities for different groups in
Xinjiang. This is the first book to use detailed ethnographic fieldwork in
Xinjiang since the violence of July 2009. It is also the first to use interviews
and participant-observations on Han perspectives in Ürümchi, erroneously
assumed to be indistinguishable from the party-state. Its analysis of nation-
building is inspired by literature on Xinjiang that focuses on interaction
between CCP strategy and Uyghur counterstrategies (Bovingdon, 2010, p.6).
However, the book analyses nation-building narratives and their effects
through triadic relations between the state, majority (Han), and minorities
(Uyghurs), and how each category is under constant reconstruction through
this process.

The book’s core argument is that the party-state’s deeply ethnocentric
approach to nation-building hardens ethnic boundaries and produces wide-
spread insecurity in multi-ethnic Xinjiang. Chinese nation-building valorises
the Han ethnic majority as China’s active nucleus, objectivising their identity
as Chinese, whilst violently including Uyghurs on terms that entail rejection
and transformation of their own identities. The party-state seeks to secure the

---

17 For example, see Zheng Yongnian’s (2007) classic on China, the de facto federal state.
perceived culture of the Han majority as the standard for all 56 minzu against the threat of Uyghur Turkic and Islamic identities. However, framing this identity narrative as a security matter increases insecurity amongst Uyghurs because their identity, articulated through Turkic language and Islam, are treated as problems to be converted, contained, or eliminated. Official identity narratives also exacerbate insecurity amongst Han in Xinjiang because they represent Uyghurs’ visible attachments to Islam and Turkic language as ever-present sources of violence and threats to China’s prosperity and identity. The party-state’s approach to nation-building thus perpetuates cycles of mistrust and violence between Han and Uyghurs, who often view each other as existential threats. Widespread identity insecurity on the ground subsequently exacerbates state insecurity because protest and violence by Uyghurs are interpreted as existential threats to China. The state confines non-violent resistance, including Turkic or Islamic identity practices, with violence, demanding assimilative ‘fusion’ that makes Uyghurs more insecure. The more the state securitises homogenous identity, the more insecurity and heterogeneous resistance it produces amongst peoples it seeks to include. This book analyses these multiple identities and insecurities to show how tensions in ethnic inclusion mean China is both a multi-ethnic civilisation pretending to be a state and a homogenising nation-state pretending to be a civilisation. This multiplicity of meaning includes groups who identify as Chinese in different ways but is a perplexing source of insecurity for those who do not.

Theoretical Framework

As the so-called Asian century unfolds, eastwards power shifts in global politics have precipitated cultural anxieties about China’s rise in policy and media circles across Europe and the United States. When interviewed by the BBC during the 2012 Chinese leadership transition, I set aside my pages of prepared notes on the impact of policy shifts on Chinese people, the biggest winners and losers of political change in China. I was repeatedly asked by BBC Manchester, Coventry, and Cardiff, ‘Should we be worried?’, as if the ‘China threat’ loomed large on the streets of Britain. Although these anxieties explicitly address shifts in material power, the underlying nationalist ontological referent of security was identity and cultural power. ‘We’ referred to us in the West and not them, the Chinese, outside. Some of the abundant IR literature on potential threats to the current international order posed by China’s rise is empirically rigorous and sensitive to history. However, mainstream IR tends to build knowledge through this domestic/international

18 For example, see Buzan & Lawson (2014); Kerr (2011).
dichotomy, reflected in debates about China’s rise. Structural realists frame China’s rise as an inevitable threat because all rising states are drawn into military conflict as their interests expand and clash with existing great powers (Mearsheimer, 2010). Neoliberals consider China an opportunity for Western gains if it continues ‘co-operation’ with prevailing norms of international relations (Ikenberry, 2014; Shambaugh, 1996; 2013). However, these approaches are not diametrically opposed but intimately related complementary opposites (Callahan, 2005, p.712). Mainstream ‘problem-solving’ IR rationalises the rules of global politics as legitimate by asking how they (China) affect an unproblematised us (the West), ethnocentrically constructing China at the infant stages of inevitably becoming like us. Instead, this book speaks to these debates through critical IR theory to construct research questions that ask how taken-for-granted categories are constituted through relations between disciplinary knowledge (identity, security, etc) and social practices (China, nation, minzu, etc).

This book analyses the mutual interplay between China’s domestic and international discourses of identity and security as ethnographic questions, broadly located in the critical paradigm that considers power as productive of identities, rather than simply repressive. Mainstream IR considers China’s rise a question of material power in relations with other states. This book’s approach offers a fresh perspective on how China’s rise shapes and is shaped by domestic identity and ethnic politics. The analytical framework draws from works in the intersection between post-structuralist IR and postcolonial theory that historicise knowledge and bring non-European voices into mainstream analysis. The postcolonial historicisation and deconstruction of binaries in knowledge production overlap with post-structuralist and feminist critiques of IR to reveal its Eurocentric discursive power in constitution of the international. These critical hermeneutic accounts retell the discipline’s foundational narratives, moving away from ‘teleological accounts of progressive journeys towards a secular liberal modernity’, in Chakrabarty’s (2000) words, to ‘provincialise Europe’ (Tickner, 2011a, pp.5–6). Postcolonial theory invokes the Foucauldian power/knowledge nexus, locating power in the construction of discourse to create dominant ‘regimes of truth’ that favour the West through binarism (Darby & Paolini, 1994, pp.385–387). The illusion of rational, cultural neutrality in world order marginalises non-Western perspectives that reveal the historical constitution of IR’s foundational concepts and contradict realist orthodoxies, according to Morgenthau (1948) and Waltz (1979), that international life has changed little over ‘millennia’ (Acharya, 1990; 2000; Franks (2003); Masters (2009); Tickner (2011a; 2011b); Weber (1998); Zehfuss (2002).

20 For example, see: Ashley (1984); Brown (2013); Cox (1981).
21 For example, see: Butler & Spivak (2007); Campbell (1998); Doty (1996); Euloe (1990; 2000); Franks (2003); Masters (2009); Tickner (2011a; 2011b); Weber (1998); Zehfuss (2002).